



THE MINISTRY OF ROADS AND TRANSPORT

**CAREER PROGRESSION GUIDELINE
FOR
ENGINEERING TECHNICIANS**

APPROVED BY

THE PUBLIC SERVICE COMMISSION

FEBRUARY, 2025

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PUBLIC SERVICE COMMISSION
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SECTION ONE: GENERAL PROVISIONS

1.1 AIMS AND OBJECTIVES

The Aims and objectives of these Career Guidelines will be: -

- (i) To provide for a well-defined career structure which will attract, motivate and retain suitably qualified Engineering Technicians in the Civil Service.
- (ii) To provide for well-defined job descriptions and specifications with clear delineation of duties and responsibilities at all levels within the career structure to enable Engineers understand the requirements and demands of their jobs.
- (iii) To establish standards for recruitment, training and advancement within the Career Structure on the basis of qualifications, knowledge, merit and ability as reflected in work performance and result.
- (iv) To ensure appropriate career planning and succession management.

1.2 ADMINISTRATION OF THE CAREER GUIDELINES

(a) Responsibility for Administration

The Career Guidelines will be administered by the respective Principal Secretaries of the State Departments responsible for the respective Engineering Technician Functions in conjunction with the Public Service Commission. In administering the Guidelines, the Principal Secretaries will ensure that the provisions are strictly observed for fair and equitable treatment of staff and that, officers are confirmed in their appointment on successful completion of the probation period.

The Principal Secretary for Roads will be responsible for registration and licensing of all Engineering Technicians; and ensuring compliance to applicable statutes and professional standards in the provision of engineering technician services in the Country.

(b) Training Scope

In administering the Guidelines, the Principal Secretaries will ensure that appropriate induction, training opportunities and facilities are provided to assist serving officers acquire the necessary additional qualifications/specialization and experience required for both efficient and effective performance of their duties and advancement within the Career Guidelines. Officers should also be encouraged to undertake training privately for self-development. However, in all matters of training, the Principal Secretary administering the Guideline, will consult the Public Service Commission.

1.3 ENGINEERING TECHNICIAN FUNCTIONS

The functions for every Cadre are well articulated in the respective Engineering Technicians Guideline.

1.4 GRADING STRUCTURE AND SCOPE

(a) Grading Structure

The grading structure for every Cadre is well outlined in the respective Engineering Technicians Guideline.

(b) Conversion into the New Grading Structure

Conversions to new designation titles and grading structures for every Engineering Technicians Cadre is reflected in the respective Career Guidelines.

(c) Serving Officers

This refers to officers who are currently occupying positions and serving in the respective Cadres. Serving Officers will adopt and convert as appropriate to the new grading structures and designations provided in these Career Guidelines though they may not be in possession of the requisite minimum qualifications and/or experience specified for the current grades. However, for advancement to higher grades, officers must be in possession of the minimum requisite qualifications and/or experience prescribed for those grades.

1.5 PROVISION OF POSTS

Posts for these cadres are provided for in the respective Ministries/State Departments responsible for the various Engineering Technician Services' authorized staff establishment to facilitate execution of the mandate as well as recruitment and advancement of officers within these Career Guidelines. However, these Career Guidelines do not constitute authority for upgrading or creation of post(s). Any additional post(s) required in the grading structures must be included in the Ministries/State Departments' establishment proposals for consideration and approval by the Public Service Commission.

1.6 ENTRY INTO THE CAREER GUIDELINES

(a) Direct Appointment

Direct appointment will normally be made in the grade of Engineering Technician III, CSG '12' as specified in the respective Career Guideline, provided that the candidates are in possession of the qualifications stipulated for the particular grade.

In exceptional circumstances, however, direct appointments may be made beyond this grade by the Public Service Commission on the recommendation of the Principal Secretaries responsible for the respective Engineering Technician functions, provided that the candidates are in possession of the minimum requisite qualifications and experience required for the particular grade.

(b) Incremental Credit(s)

Incremental credit(s) for approved experience acquired after obtaining the prescribed minimum qualifications for the grades may be awarded at the rate of one increment for each completed year of approved experience, provided the maximum of the grade is not exceeded. In awarding incremental credit(s), any period of service or experience stipulated as the basic requirement for appointment to a particular grade will be excluded.

1.7 ADVANCEMENT WITHIN THE GUIDELINES

The Career Guidelines set out the minimum qualifications and/or experience required for advancement from one grade to another. It is emphasized, however, that these are the minimum requirements that entitle officers to be considered for appointment to the next grades. In addition, advancement from one grade to another will depend on: -

- (i) Existence of a vacancy in the authorized establishment;
- (ii) Merit and ability as reflected in work performance and results; and
- (iii) Approval of the public service commission.

1.8 RECOGNIZED QUALIFICATIONS

The recognized qualifications as spelt out in these Career Guidelines are those attained from recognized institutions and colleges, and professionally approved by the Kenya Engineering Technology Registration Board.

1.9 IMPLEMENTATION OF THE CAREER GUIDELINES

The Career Guidelines will become operational with effect from the date of approval of these Career Guidelines by the Public Service Commission. On implementation, all serving officers will automatically become members of the Guidelines.

SECTION TWO: JOB DESCRIPTION AND APPOINTMENT SPECIFICATIONS

2.1 CAREER GUIDELINE FOR ENGINEERING TECHNICIANS (ROADS)

2.1.1 FUNCTION

The Engineering Technicians (Roads) Function will be to: -

- (i) Implement policies, regulations, standards, guidelines and programmes pertaining to road works and maintenance;
- (ii) Take part in maintenance and improvement of roads and works;
- (iii) Select and locate suitable materials for the maintenance of roads as per the specifications;
- (iv) Conduct inspection activities on roads projects to ensure compliance with design plans, specifications, and safety standards;
- (v) Assess road pavements conditions, identify maintenance needs, and prioritize repair and rehabilitation projects;
- (vi) Maintain records and inventory relating to roads infrastructure assets and road works;
- (vii) Conduct lifecycle cost analyses for maintenance and rehabilitation; and
- (viii) Take part in gathering essential data for road works.

2.1.2 GRADING STRUCTURE AND SCOPE

(a) Grading Structure

The Career Guideline establishes six (6) grades of Engineering Technicians (Roads) who will be designated and graded as follows:

Engineering Technicians (Roads)

Designation	CSG
Engineering Technician (Roads) III	12
Engineering Technician (Roads) II	11
Engineering Technician (Roads) I	10
Senior Engineering Technician (Roads)	9
Principal Engineering Technician (Roads)	8
Senior Principal Engineering Technician (Roads)	7

(b) Conversion to the New Grading Structure

Serving officers will convert and adopt to the new grading structure and designations as follows: -

Conversion Table

Current Designation	Job Group	New Designation	CSG
Inspector (Roads)	'H'	Engineering Technician (Roads) III	12
Senior Inspector (Roads)	'J'	Engineering Technician (Roads) II	11
Superintendent (Roads)	'K'	Engineering Technician (Roads) I	10
Senior Superintendent (Roads)	'L'	Senior Engineering Technician (Roads)	9
Chief Superintendent (Roads)	'M'	Principal Engineering Technician (Roads)	8
Principal Superintendent (Roads)	'N'		
Senior Principal Superintendent (Roads)	'P'	Senior Principal Engineering Technician (Roads)	7

Note: The Grades of Engineering Technicians (Roads) III/II, CSG 12/11, will form common establishment for the purpose of this Career Guideline.

2.1.3 RECOGNIZED QUALIFICATIONS

The following are recognized qualifications for the purpose of this career guideline:

- Diploma in any of the following disciplines: Civil Engineering, Highway Engineering or its equivalent qualification from a recognized institution.
- Higher National Diploma in any of the following options: Structures, Building and Civil Engineering, Highway Engineering or its equivalent qualification from a recognized institution.
- Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician.
- Valid annual practicing license from Kenya Engineering Technology Registration Board.
- Certificate in Supervisory Skills Course lasting not less than two (2) weeks from a recognized institution.
- Proficiency in computer applications.

2.1.4 JOB DESCRIPTIONS AND SPECIFICATIONS

1. ENGINEERING TECHNICIAN (ROADS) III, CSG 12

(a) Job Descriptions

This will be the entry and training grade into this cadre. An officer at this level will work under guidance of a designated supervisor.

Duties and responsibilities will entail: -

- (i) Collecting and collating data relating to roads infrastructure assets and road works;
- (ii) Participating in inspections of road projects;
- (iii) Taking part in conducting site investigations;
- (iv) Taking part in locating suitable materials for road works;
- (v) Preparing and maintaining daily inspection reports;
- (vi) Taking part in materials testing and quality control; and
- (vii) Preparing daily inspection reports.

(b) Job Specifications

For appointment to this grade, a candidate must have: -

- (i) Diploma in any of the following disciplines: Civil Engineering, Highway Engineering or its equivalent qualification from a recognized institution;
- (ii) Proficiency in computer proficiency; and
- (iii) Registered by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician.

II. ENGINEERING TECHNICIAN (ROADS) II, CSG 11

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Supervising, maintenance and improvement of roads and works;
- (ii) Taking part in materials testing and quality control;
- (iii) Taking part in selecting and locating suitable materials for the maintenance of roads as per the specifications;
- (iv) Taking part in conducting inspection activities on highways projects to ensure compliance with design plans, specifications, and safety standards;
- (v) Collecting and collating data relating to highway infrastructure assets and road works;
- (vi) Taking part in conducting site investigations to gather essential data for road design and; and
- (vii) Preparing and maintaining daily inspection reports.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) Served for at least (3) years in the grade of Engineering Technician (Roads) III;

- (ii) Diploma in any of the following disciplines: Civil Engineering, Highway Engineering or its equivalent qualification from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iv) Proficiency in computer applications; and
- (v) Shown merit and ability as reflected in work performance and results.

III. ENGINEERING TECHNICIAN (ROADS) I, CSG 10

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Supervising, maintenance and improvement of roads and works;
- (ii) Carrying out material testing and quality control;
- (iii) Selecting and locating suitable materials for maintenance of roads as per the specifications;
- (iv) Conducting inspection activities on highways projects to ensure compliance with design plans, specifications, and safety standards;
- (v) Compiling data relating to highway infrastructure assets and road works;
- (vi) Taking part in conducting site investigations to gather essential data for road design;
- (vii) Compiling information on inventory; and
- (viii) Preparing and maintaining daily inspection reports.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least six (6) years cumulative relevant work experience, three (3) of which should have been in the grade of Engineering Technician (Roads) II;
- (ii) Diploma in any of the following disciplines: Civil Engineering, Highway Engineering or its equivalent qualification from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iv) Proficiency in computer applications; and
- (v) Shown merit and ability as reflected in work performance and results.

IV. SENIOR ENGINEERING TECHNICIAN (ROADS), CSG 9

(a) Job Descriptions

Duties and responsibilities at this level will include: -

- (i) Supervising, maintenance and improvement of roads and works;

- (ii) Taking part in planning for materials testing and quality control in liaison with materials engineering technicians;
- (iii) Evaluating selected suitable materials for the maintenance of roads as per the specifications;
- (iv) Conducting inspection activities on highways projects to ensure compliance with design plans, specifications, and safety standards;
- (v) Compiling records and inventory relating to highway infrastructure assets and road works;
- (vi) Implementing road works and maintenance schedules and plans;
- (vii) Conducting site investigations to gather essential data for road design and;
- (viii) Interpreting engineering design details;
- (ix) Evaluating condition of existing road infrastructure and developing pavement management plans for maintenance and rehabilitation;
- (x) Inspecting road projects to ensure compliance with design plans, specifications, safety and environmental regulations;
- (xi) Taking part in preparing tender documents; and
- (xii) Preparing work schedules.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least nine (9) years cumulative relevant work experience, three (3) of which should have been in the grade of Engineering Technician (Roads) I;
- (ii) Diploma in any of the following disciplines: Civil Engineering, Highway Engineering or its equivalent qualification from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iv) Proficiency in computer applications; and
- (v) Shown merit and ability as reflected in work performance and results.

V. PRINCIPAL ENGINEERING TECHNICIAN (ROADS), CSG 8

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Taking part in, maintenance and improvement of roads and works;
- (ii) Selecting and locating suitable materials for the maintenance of roads as per the specifications;
- (iii) Conducting inspection activities on highways projects to ensure compliance with design plans, specifications, and safety standards;
- (iv) Updating records and inventory relating to highway infrastructure assets and road works;
- (v) Conducting lifecycle cost analyses for maintenance and rehabilitation.
- (vi) Implementing road works and maintenance schedules and plans;

- (vii) Conducting site investigations to gather essential data for road design;
- (viii) Interpreting engineering design details;
- (ix) Evaluating the condition of existing road infrastructure and developing pavement management plans for maintenance and rehabilitation;
- (x) Preparing tender documents;
- (xi) Preparing work schedules and plans; and
- (xii) Mentoring staff working under the officer.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least twelve (12) years cumulative relevant work experience, three (3) of which should have been in the grade of Senior Engineering Technician (Roads);
- (ii) Diploma in any of the following disciplines: Civil Engineering, Highway Engineering or its equivalent qualification from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician;
- (iv) Valid annual practicing license from Kenya Engineering Technology Registration Board;
- (v) Certificate in Supervisory Skills Course lasting not less than two (2) weeks at a recognized institution;
- (vi) Proficiency in computer applications; and
- (vii) Shown merit and ability as reflected in work performance and results.

VI. SENIOR PRINCIPAL ENGINEERING TECHNICIAN (ROADS), CSG 7

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Implementing policies, regulations, standards, strategies, guidelines and programmes pertaining to road works and maintenance;
- (ii) Supervising, maintenance and improvement of roads and works;
- (iii) Ensuring proper selection and location of suitable materials for the maintenance of roads as per the specifications;
- (iv) Supervising inspection activities on highways projects to ensure compliance with design plans, specifications, and safety standards;
- (v) Assessing highway pavements conditions, identify maintenance needs, and prioritize repair and rehabilitation projects;
- (vi) Maintaining records and inventory relating to highway infrastructure assets and road works;
- (vii) Conducting lifecycle cost analyses for maintenance and rehabilitation.
- (viii) Overseeing the updating of the roads inventory;

- (ix) Ensuring implementation of roads maintenance schedules, reports and returns;
- (x) Conducting site investigations to gather essential data for road design;
- (xi) Interpreting engineering design details;
- (xii) Preparing progress reports on road works and maintenance;
- (xiii) Taking part in preparation tender documents and specification for works;
- (xiv) Taking part in preparation of work programmes, plans and schedules; and
- (xv) Coaching and mentoring staff working under the officer.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least fifteen (15) years cumulative relevant work experience, three (3) of which should have been in the grade of Principal Engineering Technician (Roads);
- (ii) Diploma in any of the following disciplines: Civil Engineering, Highway Engineering or its equivalent qualification from a recognized institution;
- (iii) Higher National Diploma in any of the following options: Structures, Building and Civil Engineering, Highway Engineering or its equivalent qualification from a recognized institution;
- (iv) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician;
- (v) Valid annual practicing license from Kenya Engineering Technology Registration Board;
- (vi) Certificate in Supervisory Course lasting not less than (2) weeks from a recognized institution;
- (vii) Proficiency in computer applications; and
- (viii) Demonstrated outstanding professional competence and ability in work performance and results.

2.2 CAREER GUIDELINES FOR ENGINEERING TECHNICIANS (STRUCTURAL)

2.2.1 FUNCTION

- (i) Implement policies, regulations, standards, strategies, guidelines, procedures and programmes pertaining to structural facilities construction;
- (ii) Conduct site supervision of structural facilities for maintenance and construction works;
- (iii) Supervise rehabilitation and renovation of existing public structural facilities;
- (iv) Inspect civil and structural works for compliance with design, specifications, standards and safety regulations;
- (v) Inspect conditions of existing public structural facilities;
- (vi) Interpret contract drawings and specifications for use and comparing their details with work on site;
- (vii) Take part in preparation of as-built drawings and specifications;
- (viii) Prepare schedules of materials for structural facilities maintenance activities.
- (ix) Take part in preparation of project costing and budget schedules;
- (x) Prepare progress reports on civil and structural works;
- (xi) Document records and information pertaining to civil and structural works; and
- (xii) Operate civil and structural construction workshops.

1. GRADING STRUCTURE AND SCOPE

(a) Grading Structure

The Career Guideline establishes six (6) grades of Engineering Technicians (Structural) who will be designated and graded as follows: -

Engineering Technicians (Structural)

Designation	CSG
Engineering Technician (Structural) III	12
Engineering Technician (Structural) II	11
Engineering Technician (Structural) I	10
Senior Engineering Technician (Structural)	9
Principal Engineering Technician (Structural)	8
Senior Principal Engineering Technician (Structural)	7

(b) Conversion to the New Grading Structure

Serving officers will convert and adopt to the new grading structure and designations as follows: -

Conversion Table

Current Designation	Job Group	New Designation	CSG
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Structural Assistant III	'H'	Engineering Technician (Structural) III	12
Structural Assistant II	'J'	Engineering Technician (Structural) II	11
Structural Assistant I	'K'	Engineering Technician (Structural) I	10
Senior Structural Assistant	'L'	Senior Engineering Technician (Structural)	9
Chief Structural Assistant	'M'	Principal Engineering Technician (Structural)	8
Principal Structural Assistant	'N'		
Senior Principal Structural Assistant	'P'	Senior Principal Engineering Technician (Structural)	7

Note: The Grades of Engineering Technician (Structural) III/II, CSG 12/11, will form common establishment for the purpose of this Career Guideline.

2. RECOGNIZED QUALIFICATIONS

The following are recognized qualifications for the purpose of this career guideline:

- (i) Construction Technician Certificate Part III or its equivalent qualification from a recognized institution;
- (ii) Diploma in any of the following disciplines; Civil Engineering or an equivalent qualification from a recognized institution;
- (iii) Higher National Diploma in Construction in any of the following options: Structures, Building and Civil Engineering or its equivalent qualification from a recognized institution;
- (iv) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (v) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician;
- (vi) Valid annual practicing license from Kenya Engineering Technology Registration Board;
- (vii) Certificate in Supervisory Skills Course lasting not less than two (2) weeks from a recognized institution; and
- (viii) Proficiency in computer applications.

3. JOB DESCRIPTIONS AND SPECIFICATIONS

I. ENGINEERING TECHNICIAN (STRUCTURAL) III, CSG 12

(a) Job Descriptions

This will be the entry and training grade into this cadre. An officer at this level will work under the guidance of a designated supervisor. Duties and responsibilities will entail: -

- (i) Taking part in the rehabilitation and renovation of existing public infrastructure and facilities;
- (ii) Taking part in conducting inspection activities on construction infrastructure and facilities projects to ensure compliance with design plans, specifications, and safety standards;
- (iii) Conducting the inspection of conditions of existing public infrastructure and facilities;
- (iv) Collecting and collating data for site reports;
- (v) Ensuring maintenance of infrastructure and facilities construction workshop;
- (vi) Collecting material samples for testing; and
- (vii) Supervising artisans carrying out repairs and alteration of existing infrastructure and facilities.

(b) Job Specifications

For appointment to this grade, a candidate must have: -

- (i) Diploma in any of the following disciplines; Civil Engineering or an equivalent qualification from a recognized institution;
OR
Construction Technician Certificate Part III or its equivalent qualifications from a recognized institution;
- (ii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician; and
- (iii) Proficiency in computer applications.

II. ENGINEERING TECHNICIAN (STRUCTURAL) II, CSG 11

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Selecting and locating suitable materials for infrastructure and facilities construction works;
- (ii) Conducting the rehabilitation and renovation of existing public infrastructure and facilities;
- (iii) Conducting inspection activities on infrastructure and facilities construction projects to ensure compliance with design plans, specifications, and safety standards;
- (iv) Conducting the inspection of conditions of existing public infrastructure and facilities;
- (v) Compiling and submitting site reports;
- (vi) Submitting material samples for testing; and
- (vii) Supervising artisans carrying out repairs and alteration of existing infrastructure.

(b) Job Specifications

For appointment to this grade, an officer must have:

- (i) Served for at least (3) year in the grade of Engineering Technician (Structural) III;
- (ii) Diploma in any of the following disciplines; Civil Engineering or an equivalent qualification from a recognized institution;

OR

- Construction Technician Certificate Part III or its equivalent qualifications from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iv) Proficiency in computer applications; and
- (v) Shown merit and ability as reflected in work performance and results.

III. ENGINEERING TECHNICIAN (STRUCTURAL) I, CSG 10

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Selecting and locating suitable materials for infrastructure and facilities construction works;
- (ii) Conducting the rehabilitation and renovation of existing public infrastructure and facilities;
- (iii) Conducting inspection activities on infrastructure and facilities construction projects to ensure compliance with design plans, specifications, and safety standards;
- (iv) Conducting the inspection of conditions of existing public infrastructure and facilities;
- (v) Compiling and submitting site reports;
- (vi) Submitting material samples for testing; and
- (vii) Supervising artisans carrying out repairs and alteration of existing infrastructure.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least six (6) years cumulative relevant work experience, three (3) of which should have been in the grade of Engineering Technician (Structural) II;
- (ii) Diploma in any of the following disciplines; Civil Engineering or an equivalent qualification from a recognized institution;

OR

Construction Technician Certificate Part III or its equivalent qualifications from a recognized institution;

- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iv) Proficiency in computer applications; and
- (v) Shown merit and ability as reflected in work performance and results.

IV. SENIOR ENGINEERING TECHNICIAN (STRUCTURAL), CSG 9

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Conducting site supervision for infrastructure and facilities maintenance and construction works;
- (ii) Supervising the rehabilitation and renovation of existing public infrastructure and facilities;
- (iii) Conducting inspection activities on infrastructure construction projects to ensure compliance with design plans, specifications, and safety standards;
- (iv) Conducting the inspection of conditions of existing public infrastructure and facilities;
- (v) Preparing schedules of materials for infrastructure maintenance activities.
- (vi) Preparing progress reports on infrastructure construction works; and
- (vii) Managing and maintaining records and information pertaining to infrastructure and facilities construction works;
- (viii) Arranging for testing of materials;
- (ix) Coordinating supervision of artisans carrying out repairs and alteration of existing buildings; and
- (x) Controlling usage of materials on site.

(b) Job Specifications

For appointment to this grade, an officer must have:

- (i) At least nine (9) years cumulative relevant work experience, three (3) of which should have been in the grade of Engineering Technician (Structural) I;
- (ii) Diploma in any of the following disciplines; Civil Engineering or an equivalent qualification from a recognized institution;

OR

Construction Technician Certificate Part III or its equivalent qualifications from a recognized institution;

- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iv) Proficiency in computer applications; and
- (v) Demonstrated merit and ability as reflected in work performance and results.

V. PRINCIPAL ENGINEERING TECHNICIAN (STRUCTURAL), CSG 8

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Preparing site supervision programmes for infrastructure and facilities maintenance, and construction works;
- (ii) Supervising the rehabilitation and renovation of existing public infrastructure and facilities;
- (iii) Supervising inspection activities on infrastructure construction projects to ensure compliance with design plans, specifications, and safety standards;
- (iv) Supervising the inspection of conditions of existing public infrastructure and facilities;
- (v) Preparing schedules of materials for infrastructure maintenance activities.
- (vi) Checking progress reports on infrastructure construction works; and
- (vii) Managing and maintaining records and information pertaining to infrastructure and facilities construction works;
- (viii) Managing infrastructure construction workshops;
- (ix) Ensuring supervision of artisans carrying out repairs and alteration of existing infrastructure and facilities; and
- (x) Ensuring controlled usage of materials on site.

(b) Job Specifications

For appointment to this grade, an officer must have:

- (i) At least twelve (12) years cumulative relevant work experience, three (3) of which should have been in the grade of Senior Engineering Technician (Structural);
- (ii) Diploma in any of the following disciplines: Civil Engineering or an equivalent qualification from a recognized institution;
OR
Construction Technician Certificate Part III or its equivalent qualifications from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician; and
- (iv) Certificate in Supervisory Skills Course lasting not less than two (2) weeks a recognized institution; and
- (v) Proficiency in computer applications; and
- (vi) Demonstrated merit and ability as reflected in work performance and results.

VI. SENIOR PRINCIPAL ENGINEERING TECHNICIAN (STRUCTURAL), CSG 7

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Implementing policies, regulations, standards, strategies, guidelines, procedures and programmes pertaining to infrastructure and facilities construction;
- (ii) Coordinating site supervision for infrastructure facilities maintenance and construction works;
- (iii) Rehabilitate and renovate existing public infrastructure and facilities;
- (iv) Ensuring inspection activities on infrastructure and facilities construction projects to ensure compliance with design plans, specifications, and safety standards;
- (v) Coordinating the inspection of conditions of existing public infrastructure and facilities;
- (vi) Take part in preparation of contract drawings and specifications for use and comparing their details with work on site;
- (vii) Checking schedules of materials for infrastructure and facilities maintenance activities.
- (viii) Participate in planning of annual works programme in infrastructure construction;
- (ix) Checking progress reports on infrastructure and facilities construction works; and
- (x) Managing records and information pertaining to infrastructure and facilities construction works;
- (xi) Managing infrastructure and facilities construction workshops;
- (xii) Planning and scheduling appropriate training for staff development in this cadre; and
- (xiii) Taking part in preparation of tender documents, project costing and budget schedules;
- (xiv) Coordinating technical site operations;
- (xv) Adopting innovations and new technologies in the provision of mechanical building services;
- (xvi) Preparing technical and progress reports pertaining to mechanical engineering building services;
- (xvii) Ensuring technical compliance, safety and quality control in provision of mechanical building services; and
- (xviii) Coaching and mentoring of staff working under their supervision.

(b) Job Specifications

For appointment to this grade, an officer must have:

- (i) At least fifteen (15) years cumulative relevant work experience, three (3) of which should have been in the grade of Principal Engineering Technician (Structural);
- (ii) Diploma in any of the following disciplines; Civil Engineering or an equivalent qualification from a recognized institution;
OR
Construction Technician Certificate Part III or its equivalent qualifications from a recognized institution;
- (iii) Higher National Diploma in Construction (Structures, Building and Civil Engineering) or their equivalent qualification from a recognized institution;
- (iv) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician;
- (v) Certificate in Supervisory Skills Course lasting not less than two (2) weeks a recognized institution;
- (vi) Proficiency in computer applications; and
- (vii) Demonstrated outstanding professional competence and administrative ability as reflected in work performance and results.

2.3 CAREER GUIDELINE FOR ENGINEERING TECHNICIANS (BUILDING)

2.3.1 FUNCTION

The Engineering Technician (Building) function will be to: -

- (i) Implement policies, regulations, standards, strategies, guidelines, procedures and programmes pertaining to building construction;
- (ii) Conduct site supervision for building maintenance and construction works;
- (iii) Rehabilitate and renovate existing public buildings;
- (iv) Conduct inspection on building construction projects;
- (v) Inspect conditions of existing public buildings;
- (vi) Take part in preparation of contract drawings and specifications on building construction works;
- (vii) Interpret contract drawings and specifications for use and comparing their details with work on site;
- (viii) Take part in preparation of tender documents, project costing and budget schedules;
- (ix) Prepare schedules of materials for building maintenance activities;
- (x) Prepare technical progress reports on building construction works;
- (xi) Manage and maintain records and information pertaining to building construction works; and
- (xii) Manage construction workshops.

2.3.2 GRADING STRUCTURE AND SCOPE

(a) Grading Structure

The Career Guideline establishes six (6) grades of Engineering Technicians (Building) who will be designated and graded as follows: -

Engineering Technicians (Building)

Designation	CSG
Engineering Technician (Building) III	12
Engineering Technician (Building) II	11
Engineering Technician (Building) I	10
Senior Engineering Technician (Building)	9
Principal Engineering Technician (Building)	8
Senior Principal Engineering Technician (Building)	7

(b) Conversion to the New Grading Structure

Serving officers will convert and adopt to the new grading structure and designations as follows: -

Conversion Table

Current Designation	Job Group	New Designation	CSG
Inspector (Buildings)	'H'	Engineering Technician (Building) III	12
Senior Inspector (Buildings)	'J'	Engineering Technician (Building) II	11
Superintendent (Buildings)	'K'	Engineering Technician (Building) I	10
Senior Superintendent (Buildings)	'L'	Senior Engineering Technician (Building)	9
Chief Superintendent (Buildings)	'M'	Principal Engineering Technician (Building)	8
Principal Superintendent (Buildings)	'N'		
Senior Principal Superintendent (Buildings)	'P'	Senior Principal Engineering Technician (Building)	7

Note: The Grades of Engineering Technician (Building) III/II, CSG 12/11, will form common establishment for the purpose of this Career Guideline.

2.3.3 RECOGNIZED QUALIFICATIONS

The following are recognized qualifications for the purpose of this career guideline: -

- Construction Technician Certificate Part III or its equivalent qualifications from a recognized institution.
- Diploma in any of the following: Civil Engineering, Building and Construction, and Building Technology or their equivalent qualification from a recognized institution.
- Higher National Diploma in Construction in any of the following options: Structures, Building and Civil Engineering, Building Technology or their equivalent qualification from a recognized institution.
- Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician.
- Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician.
- Certificate in Supervisory Skills Course lasting not less than two (2) weeks from a recognized institution.

- (vii) Valid annual practicing license from Kenya Engineering Technology Registration Board.
- (viii) Proficiency in computer applications.

2.3.4 JOB DESCRIPTIONS AND SPECIFICATION

I. ENGINEERING TECHNICIAN (BUILDING) III, CSG 12

(a) Job Descriptions

This will be the entry and training grade into this cadre. An officer at this level will work under the guidance of a designated supervisor. Duties and responsibilities will entail: -

- (i) Taking part in the rehabilitation and renovation of existing public buildings;
- (ii) Taking part in conducting inspection activities on construction building projects to ensure compliance with design plans, specifications, and safety standards;
- (iii) Conducting the inspection of conditions of existing public buildings;
- (iv) Collecting and collating data for site reports;
- (v) Ensuring maintenance of building construction workshop;
- (vi) Collecting material samples for testing; and
- (vii) Supervising artisans carrying out repairs and alteration of existing buildings.

(b) Job Specifications

For appointment to this grade, a candidate must have: -

- (i) Diploma in any of the following disciplines: Building and Construction, and Building Technology or their equivalent qualification from a recognized institution;
OR
Construction Technician Certificate Part III or its equivalent qualifications from a recognized institution;
- (ii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician; and
- (iii) Proficiency in computer applications.

II. ENGINEERING TECHNICIAN (BUILDING) II, CSG 11

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Selecting and locating suitable materials for building construction works;
- (ii) Conducting the rehabilitation and renovation of existing public buildings;
- (iii) Conducting inspection activities on construction building projects to ensure compliance with design plans, specifications, and safety standards;
- (iv) Conducting the inspection of conditions of existing public buildings;
- (v) Compiling and submitting site reports;
- (vi) Submitting material samples for testing; and
- (vii) Supervising artisans carrying out repairs and alteration of existing buildings;

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) Served at least (3) years in the grade of Engineering Technician (Building) III;
 - (ii) Diploma in any of the following disciplines; Building and Construction, and Building Technology or their equivalent qualification from a recognized institution;
- OR**
- Construction Technician Certificate Part III or its equivalent qualifications from a recognized institution;
 - (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
 - (iv) Proficiency in computer applications; and
 - (v) Shown merit and ability as reflected in work performance and results.

III. ENGINEERING TECHNICIAN (BUILDING) I, CSG 10

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Conducting inspection activities on construction building projects to ensure compliance with design plans, specifications, and safety standards;
- (ii) Carrying out rehabilitation and renovation of existing public buildings;
- (iii) Selecting and locating suitable materials for building construction works;
- (iv) Conducting inspection of conditions of existing public buildings;
- (v) Submitting material samples for testing;
- (vi) Preparing schedules of materials for building maintenance activities;
- (vii) Compiling records and information on building construction works;
- (viii) Supervising artisans carrying out repairs and alteration of existing buildings; and
- (ix) Compiling and submitting site reports.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least six (6) years' cumulative relevant work experience, three (3) of which should have been in the grade of Engineering Technician (Building) II;
- (ii) Diploma in any of the following disciplines: Building and Construction, and Building Technology or their equivalent qualification from a recognized institution;
OR
Construction Technician Certificate Part III or its equivalent qualifications from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iv) Proficiency in computer applications; and
- (v) Shown merit and ability as reflected in work performance and results.

IV. SENIOR ENGINEERING TECHNICIAN (BUILDING), CSG 9

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Conducting site supervision for building maintenance and construction works;
- (ii) Supervising the rehabilitation and renovation of existing public buildings;
- (iii) Conducting inspection activities on construction building projects to ensure compliance with design plans, specifications, and safety standards;
- (iv) Conducting the inspection of conditions of existing public buildings;
- (v) Preparing schedules of materials for building maintenance activities.
- (vi) Preparing progress reports on building construction works;
- (vii) Keeping and maintaining records and information for building construction works;
- (viii) Arranging for testing of materials;
- (ix) Supervising artisans carrying out repairs and alteration of existing buildings; and
- (x) Controlling usage of materials on site.

(b) Job Specifications

For appointment to this grade, an officer must have:

- (i) At least nine (9) years cumulative work experience, three (3) of which should have been in the grade of Engineering Technician (Building) I;
- (ii) Construction Technician Certificate Part III or its equivalent qualifications from a recognized institution;

OR

Diploma in any of the following disciplines; Building and Construction, and Building Technology or their equivalent qualification from a recognized institution;

- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician;
- (iv) Proficiency in computer applications; and
- (v) Demonstrated merit and ability as reflected in work performance and results.

V. PRINCIPAL ENGINEERING TECHNICIAN (BUILDING), CSG 8

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Preparing site supervision programmes for building maintenance and construction works;
- (ii) Supervising the rehabilitation and renovation of existing public buildings;
- (iii) Supervising inspection activities on construction building projects to ensure compliance with design plans, specifications, and safety standards;
- (iv) Supervising the inspection of conditions of existing public buildings;
- (v) Preparing schedules of materials for building maintenance activities.
- (vi) Checking progress reports on building construction works;
- (vii) Maintaining and managing records and information pertaining to building construction works;
- (viii) Managing workshop inventory and equipment distribution;
- (ix) Ensuring supervision of artisans carrying out repairs and alteration of existing buildings; and
- (x) Ensuring controlled usage of materials on site.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least twelve (12) years cumulative relevant work experience, three (3) of which should have been in the grade of Senior Engineering Technician (Building);
- (ii) Diploma in any of the following disciplines; Civil Engineering, Building and Construction, and Building Technology or its equivalent qualification from a recognized institution;

OR

Construction Technician Certificate Part III or its equivalent qualifications from a recognized institution;

- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician;

- (iv) Certificate in Supervisory Skills Course lasting not less than two (2) weeks at a recognized institution;
- (v) Proficiency in computer applications; and
- (vi) Demonstrated merit and ability as reflected in work performance and results.

VI. SENIOR PRINCIPAL ENGINEERING TECHNICIAN (BUILDING), CSG 7

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Implementing policies, regulations, standards, strategies, guidelines, procedures and programmes pertaining to building construction;
- (ii) Coordinating site supervision for building maintenance and construction works;
- (iii) Coordinating the rehabilitation and renovation of existing public buildings;
- (iv) Ensuring inspection activities on construction building projects to ensure compliance with design plans, specifications, and safety standards;
- (v) Coordinating the inspection of conditions of existing public buildings;
- (vi) Taking part in preparation of contract drawings and specifications for use and comparing their details with work on site;
- (vii) Checking schedules of materials for building maintenance activities;
- (viii) Participate in planning annual works programme in building construction;
- (ix) Checking progress reports on building construction works;
- (x) Managing records and information pertaining to building construction works;
- (xi) Managing construction workshops;
- (xii) Allocating duties and recommending appropriate training for staff development in this cadre;
- (xiii) Taking part in preparation of tender documents, project costing and budget schedules;
- (xiv) Coordinating technical site operations;
- (xv) Adopting innovations and new technologies in the provision of mechanical building services;
- (xvi) Preparing technical and progress reports pertaining to mechanical engineering building services;
- (xvii) Ensuring technical compliance, safety and quality control in provision of mechanical building services; and
- (xviii) Coaching and mentoring of staff working under their supervision.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least fifteen (15) years' cumulative relevant work experience, three (3) of which should have been in the grade of Principal Engineering Technician (Building);
- (ii) Diploma in any of the following disciplines; Building and Construction, and Building Technology or their equivalent qualification from a recognized institution;
OR
Construction Technician Certificate Part III or its equivalent qualifications from a recognized institution;
- (iii) Higher National Diploma in Construction (Building and Construction, Building Technology) or their equivalent qualification from a recognized institution;
- (iv) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician;
- (v) Certificate in Supervisory Skills Course lasting not less than two (2) weeks at a recognized institution;
- (vi) Proficiency in computer applications; and
- (vii) Demonstrated outstanding professional competence and administrative ability as reflected in work performance and results.

2.4 CAREER GUIDELINE FOR ENGINEERING TECHNICIANS, MATERIALS (LABORATORY)

2.4.1 FUNCTION

The Engineering Technicians and Materials (Laboratory) function will be to: -

- (i) Conduct testing of samples for analytical identification, strength evaluation, safety and quality control purposes;
- (ii) Implement laboratory quality control and standards procedures in construction materials testing;
- (iii) Validate application of new analytical techniques, kits, equipment and reagents in construction materials testing;
- (iv) Implement the laid down laboratory risk mitigation measures;
- (v) Ensure calibration and maintenance of laboratory equipment;
- (vi) Collect and submit samples to reference laboratories and institutes for further analysis;
- (vii) Safe disposal of laboratory waste and containment of hazardous materials in collaboration with relevant agencies; and
- (viii) Undertake technical evaluation of laboratory equipment and supplies.

2.4.2 GRADING STRUCTURE AND SCOPE

(a) Grading Structure

The Career Guideline establishes six (6) grades of Engineering Technicians, Materials (Laboratory) who will be designated and graded as follows: -

Engineering Technicians, Materials (Laboratory)

Designation	CSG
Engineering Technicians, Materials (Laboratory) III	12
Engineering Technicians, Materials (Laboratory) II	11
Engineering Technicians, Materials (Laboratory) I	10
Senior Engineering Technicians, Materials (Laboratory)	9
Principal Engineering Technicians, Materials (Laboratory)	8
Senior Principal Engineering Technicians, Materials (Laboratory)	7

(b) Conversion to the New Grading Structure

Serving officers will convert and adopt to the new grading structure and designations as follows: -

Conversion Table

Current Designation	Job Group	New Designation	CSG
Laboratory Technologist III	H	Engineering Technicians, Materials (Laboratory) III	12
Laboratory Technologist II	J	Engineering Technicians, Materials (Laboratory) II	11
Laboratory Technologist I	K	Engineering Technicians, Materials (Laboratory) I	10
Senior Laboratory Technologist	L	Senior Engineering Technicians, Materials (Laboratory)	9
Chief Laboratory Technologist	M	Principal Engineering Technicians, Materials (Laboratory)	8
Principal Laboratory Technologist	N		
Senior Principal Laboratory Technologist I	P	Senior Principal Materials Engineering Technician (Lab)	7

Note: The grades of Engineering Technicians, Materials (Laboratory) III/II, CSG 12/11, will form common establishment for the purpose of this Career Guideline.

2.4.3 RECOGNIZED QUALIFICATIONS

The following are recognized qualifications for the purpose of this career guideline:

- Diploma in any of the following fields: - Building, Civil Engineering, Building Technology or its equivalent qualification from a recognized institution.
- Higher National Diploma in any of the following options: Structures, Building and Civil Engineering, Building Technology or equivalent qualification from a recognized institution.
- Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician.
- Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician.
- Certificate in Supervisory Skills Course lasting not less than two (2) weeks from a recognized institution.
- Proficiency in computer applications.

2.4.4 JOB DESCRIPTIONS AND SPECIFICATIONS

I. ENGINEERING TECHNICIANS, MATERIALS (LABORATORY) III, CSG 12

(a) Job Descriptions

This is the entry and training grade into this cadre. An officer at this level will work under guidance of a designated supervisor. Duties and responsibilities at this level will entail: -

- (i) Collecting and testing samples in road and building materials;
- (ii) Carrying out simple field investigations of pavement condition;
- (iii) Collecting data and samples from the field for investigations;
- (iv) Maintaining laboratory equipment and inventory;
- (v) Adhering to laboratory manuals and quality specifications; and
- (vi) Collecting and compiling laboratory records, information and inventory.

(b) Job Specifications

For appointment to this grade, a candidate must have:

- (i) Diploma in any of the following fields: - Building, Civil Engineering, Building Technology or its equivalent qualification from a recognized institution;
- (ii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician; and
- (iii) Proficiency in computer applications.

II. ENGINEERING TECHNICIANS, MATERIALS (LABORATORY) II, CSG 11

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Collecting, registering and analyzing samples;
- (ii) Undertaking analytical and/or diagnostic work on geological, concrete, water, rock, drilled cores and bitumen samples;
- (iii) Collecting data and samples from the field for investigations;
- (iv) Maintaining laboratory equipment;
- (v) Carrying out materials control tests; and
- (vi) Testing of samples including water, geological, industrial, civil engineering materials for classification, strength evaluation, level of radio activity, safety and quality control purposes and preparing reports;
- (vii) Maintaining laboratory equipment;
- (viii) Adhering to quality control procedures in materials testing for in laboratories;

- (ix) Participating in assessment of pavement condition;
- (x) Identifying and disposing laboratory wastes;
- (xi) Adhering to laboratory manuals and quality specifications;
- (xii) Collecting and compiling laboratory records, information and inventory; and
- (xiii) Preparing daily reports on materials testing for in laboratories.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) Served for at least (3) years in the grade of Engineering Technician, Materials (Laboratory) III;
- (ii) Diploma in any of the following fields: - Building, Civil Engineering, Building Technology or its equivalent qualification from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iv) Proficiency in computer applications; and
- (v) Shown merit and ability as reflected in work performance and results.

III. ENGINEERING TECHNICIANS, MATERIALS (LABORATORY) I, CSG 10

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Collecting, registering and analyzing samples;
- (ii) Undertaking analytical and/or diagnostic work on geological, concrete, water, rock, drilled cores and bitumen samples;
- (iii) Collecting data and samples from the field for investigations;
- (iv) Maintaining laboratory equipment;
- (v) Carrying out materials control tests; and
- (vi) Testing of samples including water, geological, industrial, civil engineering materials for classification, strength evaluation, level of radio activity, safety and quality control purposes and preparing reports;
- (vii) Maintaining laboratory equipment;
- (viii) Adhering to quality control procedures in materials testing for in laboratories;
- (ix) Participating in assessment of pavement condition;
- (x) Identifying and disposing laboratory wastes;
- (xi) Adhering to laboratory manuals and quality specifications;
- (xii) Collecting and compiling laboratory records, information and inventory; and
- (xiii) Preparing daily reports on materials testing for in laboratories.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least six (6) years cumulative relevant work experience, three (3) of which should have been in the grade of Engineering Technician, Materials (Laboratory) II;
- (ii) Diploma in any of the following fields: - Building, Civil Engineering, Building Technology or its equivalent qualification from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iv) Proficiency in computer applications; and
- (v) Shown merit and ability as reflected in work performance and results.

IV. SENIOR ENGINEERING TECHNICIANS, MATERIALS (LABORATORY), CSG 9

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Testing of samples including water, geotechnical, industrial, civil engineering materials for classification, strength evaluation, level of radio activity, safety and quality control purposes and preparing reports;
- (ii) Collecting samples to reference laboratories and institutes for further analysis;
- (iii) Carrying out analytical and diagnostic work;
- (iv) Carrying out laboratory risk assessment;
- (v) Maintaining laboratory equipment;
- (vi) Adhering to quality control procedures in materials testing for in laboratories;
- (vii) Applying new analytical techniques in materials testing for in laboratories;
- (viii) Analyzing road and building materials;
- (ix) Undertaking evaluation of pavement condition;
- (x) Identifying and disposing laboratory wastes;
- (xi) Adhering to laboratory manuals and quality specifications;
- (xii) Updating laboratory records, information and inventory;
- (xiii) Preparing progress reports on materials testing for in laboratories; and
- (xiv) Mentoring staff working under the officer.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least nine (9) years cumulative relevant work experience, three (3) of which should have been in the grade of Engineering Technician, Materials (Laboratory) I;

- (ii) Diploma in any of the following fields: - Building, Civil Engineering, Building Technology or its equivalent qualification from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iv) Proficiency in computer applications; and
- (v) Shown merit and ability as reflected in work performance and results.

V. PRINCIPAL ENGINEERING TECHNICIANS, MATERIALS (LABORATORY), CSG 8

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Implementing policies, regulations, standards, strategies, guidelines, procedures and programmes pertaining to materials testing;
- (ii) Supervising testing of samples including water, geological, geotechnical industrial, civil engineering materials for classification, strength evaluation, level of radio activity, safety and quality control purposes and preparing reports;
- (iii) Ensuring adherence to quality control procedures in materials testing for in laboratories;
- (iv) Inculcating innovation and adoption of new analytical techniques in materials testing for in laboratories;
- (v) Carrying out analytical and diagnostic work;
- (vi) Carrying out laboratory risk assessment;
- (vii) Collecting and submitting samples to reference laboratories and institutes for further analysis;
- (viii) Taking part in researching on new equipment, reagents, methods, issues and trends in roads and building materials testing;
- (ix) Supervising safe disposal of laboratory waste and containment of hazardous materials in collaboration with relevant agencies;
- (x) Ensuring adherence to laboratory manuals and quality specification
- (xi) Keeping safe custody of laboratory records, information and inventory;
- (xii) Preparing progress reports on materials testing for in laboratories;
- (xiii) Preparing specifications for procurement of testing materials, laboratory supplies and equipment;
- (xiv) Taking part in preparation of tender documents and technical evaluation of laboratory supplies/equipment/chemicals;
- (xv) Taking part in preparation of work plans and schedules for laboratory activities;
- (xvi) Undertaking evaluation of pavement condition; and
- (xvii) Mentoring staff working under the officer.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least twelve (12) years cumulative relevant work experience, three (3) of which should have been in the grade of Senior Engineering Technician, Materials (Laboratory);
- (ii) Diploma in any of the following fields: - Building, Civil Engineering, Building Technology or its equivalent qualification from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician;
- (iv) Valid annual practicing license from Kenya Engineering Technology Registration Board;
- (v) Certificate in Supervisory Skills Course lasting not less than two (2) weeks from a recognized institution;
- (vi) Proficiency in computer applications; and
- (vii) Demonstrated merit and ability as reflected in work performance and results.

VI. SENIOR PRINCIPAL ENGINEERING TECHNICIANS, MATERIALS (LABORATORY), CSG 7

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Implementing policies, regulations, standards, strategies, guidelines, procedures and programmes pertaining to materials testing and;
- (ii) Supervising testing of samples including water, geological, industrial, civil engineering materials for classification, strength evaluation, level of radio activity, safety and quality control purposes and preparing reports;
- (iii) Ensuring quality control in materials testing for in laboratories;
- (iv) Ensuring quality assurance service in the laboratory;
- (v) Validating application of new analytical techniques and kits;
- (vi) Supervising analytical and diagnostic work in materials testing for in laboratories;
- (vii) Ensuring implementation of laboratory quality control and standards procedures in testing;
- (viii) Supervising laboratory risk assessment;
- (ix) Ensuring regular calibration and maintenance of laboratory equipment;
- (x) Submitting samples to reference laboratories and institutes for further analysis;
- (xi) Taking part in researching on new equipment, reagents, methods, issues and trends in roads and building materials testing;
- (xii) Ensuring safe disposal of laboratory waste and containment of hazardous materials in collaboration with relevant agencies;
- (xiii) Ensuring adherence to laboratory manuals and quality specification

- (xiv) Undertake technical evaluation of laboratory equipment and chemicals;
- (xv) Maintaining laboratory records, information and inventory;
- (xvi) Administering occupational tests in road and building materials;
- (xvii) Preparing progress reports on road works and maintenance;
- (xviii) Preparing specifications for procurement of testing materials, laboratory supplies and equipment;
- (xix) Taking part in preparation of tender documents and technical evaluation of laboratory supplies/equipment;
- (xx) Taking part in preparation of work programmes, plans and schedules for laboratory activities; and
- (xxi) Coaching and mentoring staff working under the officer.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least fifteen (15) years cumulative relevant work experience, three (3) of which should have been in the grade of Principal Engineering Technician, Materials (Laboratory);
- (ii) Diploma in any of the following fields: - Building, Civil Engineering, Building Technology or its equivalent qualification from a recognized institution;
- (iii) Higher National Diploma in any of the following options: Structures, Building and Civil Engineering, Building Technology or equivalent qualification from a recognized institution;
- (iv) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician;
- (v) Valid annual practicing license from Kenya Engineering Technology Registration Board;
- (vi) Certificate in Supervisory Skills Course lasting not less than two (2) weeks from a recognized institution;
- (vii) Proficiency in computer applications; and
- (viii) Demonstrated outstanding professional competence and administrative ability as reflected in work performance and results.

2.5 CAREER GUIDELINES FOR ENGINEERING TECHNICIANS (WATER AND SEWERAGE)

2.5.1 FUNCTIONS

The Engineering Technician (Water and Sewerage) function will be to: -

- (i) Implement policies, regulations, standards, strategies, guidelines, procedures and programmes pertaining to water supply and sewerage works;
- (ii) Inspect water supply and sewerage infrastructure and systems;
- (iii) Conduct tests of water quality for pollution control;
- (iv) Collect data to facilitate design of water storage, supply and sewerage systems;
- (v) Interpret engineer's drawings and specifications related to water and sewerage infrastructure works;
- (vi) Take part in supervising construction of appropriate structures for water conservation, water supply and wastewater disposal systems;
- (vii) Supervise operation and maintenance of water storage, supply and sewerage systems;
- (viii) Calibrate and maintain water supply and sewerage equipment;
- (ix) Promote adoption innovation, emerging technologies and best practices in water supply and wastewater management; and
- (x) Establish and maintain information management system pertaining to water supply and sewerage systems.

2.5.2 GRADING STRUCTURE AND SCOPE

(a) Grading Structure

The Career Guideline establishes Six (6) grades of Engineering Technicians (Water and Sewerage) who will be designated and graded as follows:

Engineering Technicians (Water and Sewerage)

Designation	CSG
Engineering Technician (Water and Sewerage) III	12
Engineering Technician (Water and Sewerage) II	11
Engineering Technician (Water and Sewerage) I	10
Senior Engineering Technician (Water and Sewerage)	9
Principal Engineering Technician (Water and Sewerage)	8
Senior Principal Engineering Technician (Water and Sewerage)	7

(b) Conversion to the New Grading Structure

Serving officers will convert and adopt to the new grading structure and designations as follows: -

Conversion Table

Current Designation	Job Group	New Designation	CSG
Inspector (Water and Sewerage)	'H'	Engineering Technician (Water and Sewerage) III	12
Senior Inspector (Water and Sewerage)	'J'	Engineering Technician (Water and Sewerage) II	11
Superintendent (Water and Sewerage)	'K'	Engineering Technician (Water and Sewerage) I	10
Senior Superintendent (Water and Sewerage)	'L'	Senior Engineering Technician (Water and Sewerage)	9
Chief Superintendent (Water and Sewerage)	'M'	Principal Engineering Technician (Water and Sewerage)	8
Principal Superintendent (Water and Sewerage)	'N'		
Senior Principal Superintendent (Water and Sewerage)	'P'	Senior Principal Engineering Technician (Water and Sewerage)	7

Note: The Grades of Engineering Technician (Water and Sewerage) III/II, CSG 12/11, will form common establishment for the purpose of this Career Guideline.

2.5.3 RECOGNIZED QUALIFICATIONS

The following are recognized qualifications for the purpose of this career guideline: -

- Technician Part III in any of the following: Water Supply Technology, Water Engineering or its equivalent qualifications from a recognized institution.
- Diploma in any of the following fields: Water Supply Technology, Water Engineering or its equivalent qualification from a recognized institution.
- Higher National Diploma in any of the following fields: Water Supply Technology, Water Engineering, (Water Engineering), Civil Engineering or its equivalent qualification from a recognized institution.
- Registration by the Kenya Engineering Technology Registration Board (KETRB) as a candidate Engineering Technician.
- Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician.
- Valid annual practicing license from Kenya Engineering Technology Registration Board.
- Certificate in Supervisory course lasting not less than two (2) weeks from a recognized institution.

(viii) Proficiency in computer applications.

2.5.4 JOB AND APPOINTMENT SPECIFICATION

I. ENGINEERING TECHNICIAN (WATER AND SEWERAGE) III, CSG 12

(a) Job Descriptions

This will be the entry and training grade into this cadre. An officer at this level will work under the guidance of a designated supervisor.

Duties and responsibilities will entail: -

- (i) Participating in inspection of water supply and sewerage systems;
- (ii) Updating operation charts and monthly progress of works;
- (iii) Taking part in collecting samples for water quality tests;
- (iv) Maintaining water supply and sewerage treatment equipment;
- (v) Collecting data on inventory pertaining to water supply and sewerage systems; and
- (vi) Collecting operation and maintenance data.

(b) Job Specifications

For appointment to this grade, a candidate must have: -

- (i) Diploma in any of the following fields: Water Supply Technology, Water Engineering or its equivalent qualification from a recognized institution;
OR
Technician Part III in any of the following: Water Supply Technology, Water Engineering or its equivalent qualifications from a recognized institution;
- (ii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician; and
- (iii) Proficiency in computer applications.

II. ENGINEERING TECHNICIAN (WATER AND SEWERAGE) II, CSG 11

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Conducting inspection of water supply and sewerage infrastructure and systems;
- (ii) Carrying out water quality testing for pollution control;
- (iii) Taking part in calibrating and maintaining water supply and sewerage equipment;

- (iv) Compiling and collating records and inventories pertaining to water supply and sewerage systems; and
- (v) Compiling data for preparation of operation charts on water supply and sewerage systems.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) Served for at least (3) years at the grade of Engineering Technician (Water and Sewerage) III;
- (ii) Diploma in any of the following fields: Water Supply Technology, Water Engineering or its equivalent qualification from a recognized institution;
OR
Technician Part III in any of the following: Water Supply Technology, Water Engineering or its equivalent qualifications from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iv) Proficiency in computer applications; and
- (v) Shown merit and ability as reflected in work performance and results.

III. ENGINEERING TECHNICIAN (WATER AND SEWERAGE) I, CSG 10

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Carrying out water quality testing for pollution control;
- (ii) Conducting inspection of water supply and sewerage infrastructure and systems;
- (iii) Calibrating and maintaining water supply and sewerage equipment;
- (iv) Monitoring of water supply and sewerage infrastructure;
- (v) Compiling and collating records and inventories pertaining to water supply and sewerage systems; and
- (vi) Compiling data for preparation of operation charts on water supply and sewerage systems.

(b) Job Specifications

For appointment to this grade, an officer must have:

- (i) At least six (6) years' cumulative relevant work experience, three (3) of which should have been in the grade of Engineering Technician (Water and Sewerage) II;
- (ii) Diploma in any of the following fields: Water Supply Technology, Water Engineering or its equivalent qualification from a recognized institution;

OR

Technician Part III in any of the following: Water Supply Technology, Water Engineering or its equivalent qualifications from a recognized institution;

- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iv) Proficiency in computer applications; and
- (v) Shown merit and ability as reflected in work performance and results.

IV. SENIOR ENGINEERING TECHNICIAN (WATER AND SEWERAGE), CSG 9

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Conducting inspection of water supply and sewerage infrastructure and systems;
- (ii) Carrying out water quality testing for pollution control;
- (iii) Monitoring of water supply and sewerage infrastructure;
- (iv) Calibrating and maintaining water supply and sewerage equipment;
- (v) Implementing innovation and adoption of best practices in wastewater management;
- (vi) Updating records and inventories pertaining to water supply and sewerage systems;
- (vii) Compiling and analyzing data for the preparation of operation charts and progress reports on water supply and sewerage systems; and
- (viii) Supervising water works operators and artisans.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least nine (9) years cumulative relevant work experience, three (3) of which should have been in the grade of Engineering Technician (Water and Sewerage) I;
- (ii) Diploma in any of the following fields: Water Supply Technology, Water Engineering or its equivalent qualification from a recognized institution;
OR
Technician Part III in any of the following: Water Supply Technology, Water Engineering or its equivalent qualifications from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iv) Proficiency in computer applications; and
- (v) Demonstrated merit and ability as reflected in work performance and results.

V. PRINCIPAL ENGINEERING TECHNICIAN (WATER AND SEWERAGE), CSG 8

(a) Job Descriptions

Duties and responsibilities at this level will include: -

- (i) Implementing policies, regulations, standards, strategies, guidelines, procedures and programmes pertaining to water supply and sewerage works;
- (ii) Inspecting water supply and sewerage infrastructure and systems;
- (iii) Testing water quality for pollution control;
- (iv) Taking part in the designing of water storage, supply and sewerage systems;
- (v) Interpreting contract documents used on work site;
- (vi) Supervising water supply and sewerage infrastructure;
- (vii) Supervising operation and maintenance of water storage, supply and sewerage systems;
- (viii) Calibrating and maintaining water supply and sewerage equipment;
- (ix) Inculcating innovation and adoption of best practices in wastewater management;
- (x) Maintaining records, information and inventory pertaining to water supply and sewerage systems;
- (xi) Preparing operation charts and monthly progress report on water supply and sewerage systems;
- (xii) Carrying out technical evaluation of tenders for water and sewerage inputs; and
- (xiii) Mentoring staff working under the officer.

(b) Job Specifications

For appointment to this grade, an officer must have:

- (i) At least twelve (12) years cumulative work experience, three (3) of which should have been in the grade of Senior Engineering Technician (Water and Sewerage);
- (ii) Diploma in any of the following fields: Water Supply Technology, Water Engineering or its equivalent qualification from a recognized institution;
OR
Technician Part III in any of the following: Water Supply Technology, Water Engineering or its equivalent qualifications from a recognized institution;
- (iii) Certificate in Supervisory Skills Course lasting not less than two (2) weeks at a recognized institution;
- (iv) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician;
- (v) Proficiency in computer applications; and
- (vi) Demonstrated merit and ability as reflected in work performance and results.

**VI. SENIOR PRINCIPAL ENGINEERING TECHNICIAN (WATER AND SEWERAGE),
CSG 7**

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Implementing policies, regulations, standards, strategies, guidelines, procedures and programmes pertaining to water supply and sewerage works;
- (ii) Supervising inspection of water supply and sewerage infrastructure and systems;
- (iii) Coordinating water quality testing for pollution control;
- (iv) Taking part in the designing of water storage, supply and sewerage systems;
- (v) Interpreting contract documents used on work site;
- (vi) Supervising of water supply and sewerage infrastructure;
- (vii) Supervising operation and maintenance of water storage, supply and sewerage systems;
- (viii) Ensuring calibration and maintenance of water supply and sewerage equipment;
- (ix) Inculcating innovation and adoption of best practices in wastewater management;
- (x) Maintaining records, information and inventory pertaining to water supply and sewerage systems;
- (xi) Preparing operation charts and monthly progress report on water supply and sewerage systems;
- (xii) Conducting technical evaluation of tenders for water and sewerage inputs; and
- (xiii) Coaching and mentoring staff working under the officer.

(b) Job Specifications

For appointment to this grade, an officer must have:

- (i) At least fifteen (15) years cumulative work experience, three (3) of which should have been in the grade of Principal Engineering Technician (Water and Sewerage);
- (ii) Diploma in any of the following fields: Water Supply Technology, Water Engineering or its equivalent qualification from a recognized institution;
OR
Technician Part III in any of the following: Water Supply Technology, Water Engineering or its equivalent qualifications from a recognized institution;
- (iii) Higher National Diploma in any of the following fields: Water Supply Technology, Water Engineering, (Water Engineering), Civil Engineering or its equivalent qualification from a recognized institution;

- (iv) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician;
- (v) Certificate in Supervisory Course lasting not less than (2) weeks from a recognized institution;
- (vi) Proficiency in computer applications; and
- (vii) Demonstrated outstanding professional competence and administrative ability as reflected in work performance and results.

2.6 CAREER GUIDELINE FOR ENGINEERING TECHNICIANS, MECHANICAL (BUILDING SERVICES)

2.6.1 FUNCTION

The Engineering Technician, Mechanical (Building Services) function will be to:

- (i) Implement policies, regulations, standards, guidelines and strategies in carrying out mechanical installation works;
- (ii) Inspect, test and maintain mechanical installations and equipment in buildings and public facilities;
- (iii) Take part in preparation of predictive, corrective and preventive of mechanical installations and equipment maintenance schedule;
- (iv) Interpret mechanical contracts and installation drawings and specifications;
- (v) Prepare design drawings and specifications under direction of mechanical engineers (building service);
- (vi) Construct, install, test and take part in commissioning of mechanical works and equipment in buildings and public facilities;
- (vii) Manage mechanical maintenance materials, spares, accessories and test equipment;
- (viii) Take part in digitization, storage and retrieval of drawings for utilization;
- (ix) Take part in preparation of tender documents, project costing and budget schedules;
- (x) Undertake technical site operations for mechanical engineering building services;
- (xi) Adopt innovations and new technologies in the provision of mechanical building services;
- (xii) Prepare technical and progress reports pertaining to mechanical engineering building services; and
- (xiii) Ensuring technical compliance, safety and quality control in provision of mechanical building services.

2.6.2 GRADING STRUCTURE AND SCOPE

(a) Grading Structure

The Career Guideline establishes six (6) grades for Engineering Technicians, Mechanical (Building Services), who will be designated and graded as follows: -

Engineering Technicians, Mechanical (Building Services)

Designation	CSG
Engineering Technician, Mechanical (BS) III	12
Engineering Technician, Mechanical (BS) II	11
Engineering Technician, Mechanical (BS) I	10
Senior Engineering Technician, Mechanical (BS)	9

Principal Engineering Technician, Mechanical (BS)	8
Senior Principal Engineering Technician, Mechanical (BS)	7

(b) Conversion to the New Grading Structure

Serving officers will convert and adopt to the new grading structure and designations as follows: -

Conversion Table

Current Designation	Job Group	New Designation	CSG
Inspector (Mechanical (BS))	H	Engineering Technician, Mechanical (BS) III	12
Senior Inspector (Mechanical (BS))	J	Engineering Technician, Mechanical (BS) II	11
Superintendent (Mechanical (BS))	K	Engineering Technician, Mechanical (BS) I	10
Senior Superintendent (Mechanical (BS))	L	Senior Engineering Technician, Mechanical (BS)	9
Chief Superintendent (Mechanical (BS))	M	Principal Engineering Technician, Mechanical (BS)	8
Principal Superintendent (Mechanical (BS))	N		
Senior Principal Superintendent (Mechanical (BS))	P	Senior Principal Engineering Technician, Mechanical (BS)	7

Note: The grade of Engineering Technician, Mechanical (BS) III/II, CSG 12/11 will form common establishment for the purpose of this Career Guideline.

2.6.3 RECOGNIZED QUALIFICATIONS

The following are the recognized qualifications for the purpose of this Career Guideline: -

- Diploma in Mechanical Engineering in any of the following options; Production, Welding and Fabrication, Material and Metallurgy or its equivalent from a recognized institution;
- Higher National Diploma in Mechanical Engineering or its equivalent qualification from a recognized institution;
- Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician;

- (v) Valid annual practicing license from Kenya Engineering Technology Registration Board;
- (vi) Certificate in Supervisory Skills Course lasting not less than two (2) weeks from a recognized institution; and
- (vii) Proficiency in computer applications.

2.6.4 JOB DESCRIPTIONS AND SPECIFICATIONS

I. ENGINEERING TECHNICIAN, MECHANICAL (BS) III, CSG 12

(a) Job Descriptions

This will be the entry and training grade into this cadre. An officer at this level will work under the guidance of a designated supervisor. Duties and responsibilities will entail: -

- (i) Taking part in inspection, repairing and maintenance of mechanical installations and equipment including power generating engines, fire-fighting equipment, refrigeration and air-conditioning plant in buildings and public facilities;
- (ii) Implementing maintenance schedule for mechanical installations and equipment;
- (iii) Assembling and maintaining mechanical works and equipment in buildings and public facilities;
- (iv) Participating in technical site operations; and
- (v) Collecting information on records and inventory pertaining to mechanical building services.

(b) Job Specifications

For appointment to this grade, a candidate must have: -

- (i) Diploma in Mechanical Engineering in any of the following options: Plant, Production, Welding and Fabrication, Material and Metallurgy or its equivalent from a recognized institution;
- (ii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician; and
- (iii) Proficiency in computer applications.

II. ENGINEERING TECHNICIAN, MECHANICAL (BS) II, CSG 11

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Inspecting, testing and maintaining mechanical installations and equipment in buildings and public facilities;
- (ii) Implementing predictive, corrective and preventive maintenance schedule for mechanical installations and equipment;
- (iii) Participating in preparation of design drawings and specifications under direction of mechanical engineers (building service);
- (iv) Assembling, dismantling and maintaining mechanical works and equipment in buildings and public facilities;
- (v) Testing mechanical installations before and after repairs;
- (vi) Carrying out technical site operations;
- (vii) Compiling data pertaining to mechanical engineering building services;
- (viii) Adopting innovations and new technologies in the provision of mechanical building services;
- (ix) Compiling specifications for mechanical maintenance materials, spares, accessories and test equipment; and
- (x) Collecting information pertaining to records and inventory for mechanical building services.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) Served for at least (3) years in the grade of Engineering Technician, Mechanical (B5) III;
- (ii) Diploma in Mechanical Engineering in any of the following options: Plant, Production, Welding and Fabrication, Material and Metallurgy or its equivalent from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iv) Proficiency in computer applications; and
- (v) Shown merit and ability as reflected in work performance and results.

III. ENGINEERING TECHNICIAN, MECHANICAL (B5) I, CSG 10

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Testing mechanical installations before and after repairs;
- (ii) Carrying out technical site operations;
- (iii) Inspecting, testing and maintaining mechanical installations and equipment in buildings and public facilities;
- (iv) Implementing predictive, corrective and preventive maintenance schedule for mechanical installations and equipment;
- (v) Assembling, dismantling and maintaining mechanical works and equipment in buildings and public facilities;

- (vi) Participating in preparation of design drawings and specifications under direction of mechanical engineers (building service);
- (vii) Compiling data pertaining to mechanical engineering building services;
- (viii) Adopting innovations and new technologies in the provision of mechanical building services;
- (ix) Compiling specifications for mechanical maintenance materials, spares, accessories and test equipment; and
- (x) Collecting information pertaining to records and inventory for mechanical building services.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least six (6) years cumulative relevant work experience, three (3) of which should have been in the grade of Engineering Technician, Mechanical (BS) II;
- (ii) Diploma in Mechanical Engineering in any of the following options: Plant, Production, Welding and Fabrication, Material and Metallurgy or its equivalent from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iv) Proficiency in computer applications; and
- (v) Shown merit and ability as reflected in work performance and results.

IV. SENIOR ENGINEERING TECHNICIAN, MECHANICAL (BS), CSG 9

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Inspecting, testing and maintaining mechanical installations and equipment in buildings and public facilities;
- (ii) Implementing predictive, corrective and preventive maintenance schedule for mechanical installations and equipment;
- (iii) Interpreting mechanical contracts and installation drawings and specifications;
- (iv) Participating in preparation of design drawings and specifications under direction of mechanical engineers (building service);
- (v) Assembling, dismantling, installing, testing and maintaining mechanical works and equipment in buildings and public facilities;
- (vi) Ensuring safe custody mechanical maintenance materials, spares, accessories and test equipment;
- (vii) Conducting technical site operations;
- (viii) Participating in preparation of technical specifications;
- (ix) Implementing innovations, best practices and emerging trends pertaining to mechanical building services; and

- (x) Compiling and analyzing data for preparation of technical reports pertaining to mechanical engineering building services.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least nine (9) years cumulative work experience, three (3) of which should have been in the grade of Engineering Technician, Mechanical (BS) I;
- (ii) Diploma in Mechanical Engineering in any of the following options: Plant, Production, Welding and Fabrication, Material and Metallurgy or its equivalent from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iv) Proficiency in computer applications; and
- (v) Shown merit and ability as reflected in work performance and results.

V. PRINCIPAL ENGINEERING TECHNICIAN, MECHANICAL (BS), CSG 8

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Implementing policies, regulations, standards, guidelines and strategies in carrying out mechanical installation works;
- (ii) Supervising inspection, testing and maintenance of mechanical installations and equipment in buildings and public facilities;
- (iii) Taking part in preparation of predictive, corrective and preventive of mechanical installations and equipment maintenance schedule;
- (iv) Interpreting mechanical contracts and installation drawings and specifications;
- (v) Preparing design drawings and specifications under direction of mechanical engineers (building service);
- (vi) Supervising, installation, testing, commissioning and maintenance of mechanical works and equipment in buildings and public facilities;
- (vii) Controlling and accounting mechanical maintenance materials, spares, accessories and test equipment;
- (viii) Taking part in digitization, storage and retrieval of drawings for utilization;
- (ix) Taking part in preparation of tender documents, project costing and budget schedules;
- (x) Supervising technical site operations;
- (xi) Inculcating innovations, new technologies pertaining to mechanical building services;
- (xii) Preparing technical progress reports pertaining to mechanical engineering building services; and

- (xiii) Ensuring technical compliance, safety and quality control in provision of mechanical building services.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least twelve (12) years cumulative relevant work experience, three (3) of which should have been in the grade of Senior Engineering Technician, Mechanical (BS);
- (ii) Diploma in Mechanical Engineering in any of the following options: Plant, Production, Welding and Fabrication, Material and Metallurgy or its equivalent from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician;
- (iv) Certificate in Supervisory Skills Course lasting not less than two (2) weeks from a recognized institution;
- (v) Proficiency in computer applications; and
- (vi) Shown merit and ability as reflected in work performance and results.

VI. SENIOR PRINCIPAL ENGINEERING TECHNICIAN, MECHANICAL (BS), CSG 7

(a) Job Descriptions

At this level the officer will be responsible to a senior officer at the Headquarters.

Duties and responsibilities will entail: -

- (i) Implementing policies, regulations, standards, guidelines and strategies in carrying out mechanical installation works;
- (ii) Supervising inspection, testing and maintenance of mechanical installations and equipment in buildings and public facilities;
- (iii) Taking part in preparation of predictive, corrective and preventive of mechanical installations and equipment maintenance schedule;
- (iv) Interpreting mechanical contracts and installation drawings and specifications;
- (v) Preparing design drawings and specifications under direction of mechanical engineers (building service);
- (vi) Coordinating, installation, testing, commissioning and maintenance of mechanical works and equipment in buildings and public facilities;
- (vii) Managing mechanical maintenance materials, spares, accessories and test equipment;
- (viii) Taking part in digitization, storage and retrieval of drawings for utilization;
- (ix) Taking part in preparation of tender documents, project costing and budget schedules;
- (x) Coordinating technical site operations;

- (xi) Adopting innovations and new technologies in the provision of mechanical building services;
- (xii) Preparing technical and progress reports pertaining to mechanical engineering building services;
- (xiii) Ensuring technical compliance, safety and quality control in provision of mechanical building services; and
- (xiv) Coaching and mentoring of staff working under their supervision.

(b) Job Specifications

For appointment to this grade, an officer must have:

- (i) At least fifteen (15) years cumulative relevant work experience, three (3) of which should have been in the grade of Principal Engineering Technician, Mechanical (BS);
- (ii) Diploma in Mechanical Engineering in any of the following options: Plant, Production, Welding and Fabrication, Material and Metallurgy or its equivalent qualification from a recognized institution;
OR
Technician Part III in Mechanical Engineering or its equivalent qualifications from a recognized institution;
- (iii) Higher Diploma in Mechanical Engineering or its equivalent qualification from a recognized institution;
- (iv) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician;
- (v) Valid annual practicing license from Kenya Engineering Technology Registration Board;
- (vi) Certificate in Supervisory Skills Course not lasting less than two (2) weeks from a recognized institution;
- (vii) Proficiency in computer applications; and
- (viii) Demonstrated outstanding professional competence and administrative ability as reflected in work performance and results.

2.7 CAREER GUIDELINE FOR ENGINEERING TECHNICIANS (AUTOMOTIVE)

2.7.1 FUNCTION

The overall function will be to carry out mechanical maintenance of vehicles; and electrical works on vehicles, plant and equipment. The Automotive Engineering function will have two (2) components namely:

- (i) Mechanical
- (ii) Motor Vehicle/Plant - Electrical

1. Mechanical

The Automotive Engineering (Mechanical) function will be to:

- (i) Implement policies, regulations, standards, guidelines and strategies pertaining to mechanical maintenance of vehicles;
- (ii) Carry out diagnostic and analytics on motor vehicle mechanical parts, components and systems;
- (iii) Carry out mechanical maintenance of motor vehicles;
- (iv) Inspect mechanical parts and systems of motor vehicles for compliance with quality standards and specifications;
- (v) Carry out pre-delivery inspection of automobiles, bicycles and other machinery and installations;
- (vi) Inspect garages for approval by the chief engineer;
- (vii) Conduct suitability test for drivers;
- (viii) Verify motor vehicles spare parts and accessories;
- (ix) Conduct valuation of motor vehicles;
- (x) Undertake pre/post repair inspection for costing and quality control;
- (xi) Conduct inspection of motor vehicles involved in accident for repairs and investigations;
- (xii) Take part in preparation of tender documents, development of specifications and technical evaluation; and
- (xiii) Prepare technical reports pertaining to automotive mechanical engineering services.

2. Motor Vehicle/Plant - Electrical

The Automotive Engineering (Motor Vehicle/Plant-Electrical) function will be to:

- (i) Implement policies, regulations, standards, guidelines and strategies on automotive and plant electrical systems;
- (ii) Service and maintain all electrical systems on motor vehicles, plant and equipment;
- (iii) Install and maintain communication systems and accessories on motor vehicles, plant and equipment;

- (iv) Inspect, test and examine electrical systems on motor vehicles, plant and equipment;
- (v) Diagnose electrical faults in motor vehicles, plant and equipment;
- (vi) Interpret electrical wiring sketches and diagrams in motor vehicles, plant and equipment;
- (vii) Install electrical components and wiring in motor vehicles, plant and equipment;
- (viii) Conduct pre-delivery inspection of automobiles, bicycles and other machinery and installations;
- (ix) Verify spare parts and accessories pertaining to automotive/plant electrical systems;
- (x) Ensure technical compliance, safety and quality control in provision of automotive/plant electrical services;
- (xi) Take part in preparation of tender documents, development of specifications and technical evaluation;
- (xii) Prepare technical reports pertaining to automotive/plant electrical systems; and
- (xiii) Maintain records and inventory pertaining to automotive/plant electrical systems.

2.7.2 GRADING STRUCTURE AND SCOPE

(a) Grading Structure

The Career Guidelines establishes six (6) grades of Engineering Technicians (Automotive) who will be designated and graded as follows: -

Engineering Technicians (Automotive)

Designation	CSG
Engineering Technician (Automotive) III	12
Engineering Technician (Automotive) II	11
Engineering Technician (Automotive) I	10
Senior Engineering Technician (Automotive)	9
Principal Engineering Technician (Automotive)	8
Senior Principal Engineering Technician (Automotive)	7

(b) Conversion to the New Grading Structure

Serving officers will convert and adopt to the new grading structure and designations as follows: -

Conversion Table

Current Designation	Job Group	Proposed New Designation	CSG
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Inspector (Mechanical/Electrical-MVP)	H	Engineering Technician (Automotive) III	12
Senior Inspector (Mechanical/Electrical-MVP)	J	Engineering Technician (Automotive) II	11
Superintendent (Mechanical/Electrical-MVP)	K	Engineering Technician (Automotive) I	10
Senior Superintendent (Mechanical/Electrical-MVP)	L	Senior Engineering Technician (Automotive)	9
Chief Superintendent (Mechanical)	M	Principal Engineering Technician (Automotive)	8
Principal Superintendent (Mechanical/Electrical-MVP)	N		
Senior Principal Superintendent (Mechanical/Electrical-MVP)	P	Senior Principal Engineering Technician (Automotive)	7

Note: The grade of Engineering Technician (Automotive) III/II, CSG 12/11 will form common establishment for the purpose of this Career guideline.

2.7.3 RECOGNIZED QUALIFICATIONS

The following are the recognized qualifications for the purpose of this Guideline: -

- (i) Technician Part III in Automotive Engineering or its equivalent qualifications from a recognized institution.
- (ii) Diploma in any of the following fields: Automotive Engineering, mechatronic engineering its equivalent qualification from a recognized institution.
- (iii) Higher National Diploma in Mechanical Engineering or its equivalent qualification from a recognized institution.
- (iv) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician.
- (v) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician.
- (vi) Valid annual practicing license from Kenya Engineering Technology Registration Board.
- (vii) Certificate in Supervisory course lasting not less than two (2) weeks from a recognized institution.
- (viii) Valid Driving License.
- (ix) Proficiency in computer applications.

2.7.4 JOB DESCRIPTIONS AND SPECIFICATIONS

I. ENGINEERING TECHNICIAN (AUTOMOTIVE) III, CSG 12

(a) Job Descriptions

This will be the entry and training grade into this cadre. An officer at this level will work under the guidance designated supervisor and may be deployed to any of the following functional area:

- (i) Mechanical
- (ii) Motor Vehicles/Plant-Electrical

1. Mechanical

Duties and responsibilities will entail: -

- (i) Participating in inspection of motor vehicles for repairing or boarding;
- (ii) Repairing faults in automotive systems and components including engines, transmission, brakes and fuel systems;
- (iii) Carrying out preventive/scheduled and breakdown/corrective maintenance of motor vehicles for optimal performance;
- (iv) Taking part in pre-delivery inspection of automobiles, bicycles and other machinery and installations;
- (v) Collecting and collating data on motor vehicles valuation and serviceability reports; and
- (vi) Taking part in inspection of motor vehicles involved in accident for repairs and investigations.

2. Motor Vehicles/Plant-Electrical

Duties and responsibilities will entail: -

- (i) Servicing and carrying out minor repairs of electrical systems on motor vehicles, plant and equipment;
- (ii) Taking part in inspection, testing and examination of electrical systems on motor vehicles plant and equipment;
- (iii) Fitting communication systems and accessories on motor vehicles, plant and equipment;
- (iv) Checking electrical faults in motor vehicles, plant and equipment; and
- (v) Collecting information on records and inventory pertaining to automotive/plant electrical systems.

(b) Job Specifications

For appointment to this grade, a candidate must have: -

- (i) Technician Part III in Automotive Engineering or its equivalent qualifications from a recognized institution;
OR
Diploma in any of the following fields: Automotive Engineering, mechatronic engineering its equivalent qualification from a recognized institution;
- (ii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iii) Valid Driving License; and
- (iv) Proficiency in computer applications.

II. ENGINEERING TECHNICIAN (AUTOMOTIVE) II, CSG 11

(a) Job Descriptions

An officer at this level will be deployed to any of the following functional areas:

- (i) Mechanical
- (ii) Motor Vehicles/Plant-Electrical

1. Mechanical

Duties and responsibilities will entail: -

- (i) Diagnosing and repairing faults in automotive systems and components including engines, transmission, brakes and fuel systems;
- (ii) Performing preventive/scheduled and breakdown/corrective maintenance of motor vehicles for optimal performance;
- (iii) Testing motor vehicles before and after repair;
- (iv) Carrying out inspection of motor vehicle mechanical parts, accessories and systems for compliance with quality standards and specifications;
- (v) Conducting pre-delivery inspection of automobiles, bicycles and other machinery and installations;
- (vi) Inspecting garages for approval;
- (vii) Inspecting motor vehicles for repairing or boarding;
- (viii) Undertaking suitability tests for drivers;
- (ix) Carrying out valuation of motor vehicles and preparing reports;
- (x) Carrying out inspection of motor vehicles involved in accident for repairs and investigations; and
- (xi) Updating records and inventory pertaining to automotive mechanical engineering services.

2. Motor Vehicles/Plant-Electrical

Duties and responsibilities will entail: -

- (i) Servicing and maintaining of electrical systems on motor vehicles, plant and equipment;
- (ii) Inspecting, testing and examining electrical systems on motor vehicles plant and equipment;
- (iii) Installing and maintaining communication systems and accessories on motor vehicles, plant and equipment;
- (iv) Diagnosing electrical faults in motor vehicles, plant and equipment;
- (v) Installing electrical components and wiring in motor vehicles, plant and equipment;
- (vi) Taking part in pre-delivery inspection of automobiles, bicycles and other machinery and installations;
- (vii) Taking part in verification of spare parts and accessories pertaining to automotive/plant electrical systems;
- (viii) Compiling data on inventory pertaining to automotive/plant electrical systems; and
- (ix) Compiling data on motor vehicle serviceability and valuation.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) Served for at least (3) years in the grade of Engineering Technician (Automotive) III;
- (ii) Diploma in any of the following fields: Automotive Engineering, mechatronic engineering its equivalent qualification from a recognized institution;
OR
Technician Part III in Automotive Engineering or its equivalent qualifications from a recognized institution;
- (iii) Valid Driving License;
- (iv) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (v) Proficiency in computer applications; and
- (vi) Shown merit and ability as reflected in work performance and results.

III. ENGINEERING TECHNICIAN (AUTOMOTIVE) I, CSG 10

(a) Job Descriptions

An officer at this level will be deployed to any of the following functional areas:

- (i) Mechanical
- (ii) Motor Vehicles/Plant-Electrical

1. Mechanical

Duties and responsibilities will entail: -

- (i) Diagnosing and repairing faults in automotive systems and components including engines, transmission, brakes and fuel systems;
- (ii) Performing preventive/scheduled and breakdown/corrective maintenance of motor vehicles for optimal performance;
- (iii) Testing motor vehicles before and after repair;
- (iv) Carrying out inspection of motor vehicle mechanical parts, accessories and systems for compliance with quality standards and specifications;
- (v) Conducting pre-delivery inspection of automobiles, bicycles and other machinery and installations;
- (vi) Inspecting garages for approval;
- (vii) Inspecting motor vehicles for repairing or boarding;
- (viii) Undertaking suitability tests for drivers;
- (ix) Carrying out valuation of motor vehicles and preparing reports;
- (x) Carrying out inspection of motor vehicles involved in accident for repairs and investigations; and
- (xi) Updating records and inventory pertaining to automotive mechanical engineering services.

2. Motor Vehicles/Plant-Electrical

Duties and responsibilities will entail: -

- (i) Servicing and maintaining of electrical systems on motor vehicles, plant and equipment;
- (ii) Inspecting, testing and examining electrical systems on motor vehicles plant and equipment;
- (iii) Installing and maintaining communication systems and accessories on motor vehicles, plant and equipment;
- (iv) Diagnosing electrical faults in motor vehicles, plant and equipment;
- (v) Installing electrical components and wiring in motor vehicles, plant and equipment;
- (vi) Taking part in pre-delivery inspection of automobiles, bicycles and other machinery and installations;
- (vii) Taking part in verification of spare parts and accessories pertaining to automotive/plant electrical systems;
- (viii) Compiling data on inventory pertaining to automotive/plant electrical systems; and
- (ix) Compiling data on motor vehicle serviceability and valuation.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least six (6) years cumulative relevant work experience, three (3) of which should have been in the grade of Engineering Technician, (Automotive) II;
- (ii) Technician Part III in Automotive Engineering or its equivalent qualifications from a recognized institution;
OR
Diploma in any of the following fields: Automotive Engineering, mechatronic engineering its equivalent qualification from a recognized institution;
- (iii) Valid Driving License;
- (iv) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (v) Proficiency in computer applications; and
- (vi) Shown merit and ability as reflected in work performance and results.

IV. SENIOR ENGINEERING TECHNICIAN (AUTOMOTIVE), CSG 9

(a) Job Descriptions

An officer at this level will be deployed to any of the following functional areas:

- (i) Mechanical
- (ii) Motor Vehicles/Plant-Electrical

1. Mechanical

Duties and responsibilities will entail: -

- (i) Diagnosing and analyzing motor vehicle mechanical parts, components and systems;
- (ii) Supervising mechanical maintenance of motor vehicles;
- (iii) Inspecting motor vehicle mechanical parts, accessories and systems for compliance with quality standards and specifications;
- (iv) Conducting pre-delivery inspection of automobiles, bicycles and other machinery and installations;
- (v) Carrying out inspection of garages;
- (vi) Inspecting motor vehicle mechanical systems for repairing or boarding;
- (vii) Undertaking suitability tests for drivers;
- (viii) Carrying out valuation of motor vehicles and preparing reports;
- (ix) Conducting pre/post repair inspection for costing and quality control;
- (x) Carrying out inspection of motor vehicles involved in accident for repairs and investigations;
- (xi) Supervising technical operations in the workshop;

- (xii) Analyzing data for preparation of technical reports;
- (xiii) Updating records and inventory pertaining to automotive mechanical engineering services; and
- (xiv) Preparing progress reports.

2. Motor Vehicles/Plant-Electrical

Duties and responsibilities will entail: -

- (i) Servicing and maintaining of electrical systems on motor vehicles, plant and equipment;
- (ii) Inspecting, testing and examining electrical systems on motor vehicles plant and equipment;
- (iii) Installing and maintaining communication systems and accessories on motor vehicles, plant and equipment;
- (iv) Diagnosing electrical faults in motor vehicles, plant and equipment;
- (v) Interpreting electrical wiring sketches and diagrams in motor vehicles, plant and equipment;
- (vi) Installing electrical components and wiring in motor vehicles, plant and equipment;
- (vii) Conducting pre-delivery inspection of automobiles, bicycles and other machinery and installations;
- (viii) Verifying spare parts and accessories pertaining to automotive/plant electrical systems;
- (ix) Analyzing data for preparation of technical reports;
- (x) Updating records and inventory pertaining to automotive/plant electrical systems; and
- (xi) Preparing progress reports.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least nine (9) years cumulative work experience, three (3) of which should have been in the grade of Engineering Technician, (Automotive) I;
 - (ii) Technician Part III in Automotive Engineering or its equivalent qualifications from a recognized institution;
- OR**
- (iii) Diploma in any of the following fields: Automotive Engineering, mechatronic engineering its equivalent qualification from a recognized institution;
 - (iv) Valid Driving License;
 - (v) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
 - (vi) Proficiency in computer applications; and
 - (vii) Shown merit and ability as reflected in work performance and results.

V. PRINCIPAL ENGINEERING TECHNICIAN (AUTOMOTIVE), CSG 8

(a) Job Descriptions

An officer at this level will be deployed to any of the following functional areas:

- (i) Mechanical
- (ii) Motor Vehicles/Plant-Electrical

I. Mechanical

Duties and responsibilities will entail: -

- (i) Implementing policies, regulations, standards, guidelines and strategies pertaining to mechanical maintenance of vehicles;
- (ii) Diagnosing and analyzing motor vehicle mechanical parts, components and systems;
- (iii) Supervising mechanical maintenance of motor vehicles;
- (iv) Coordinating inspection of mechanical parts and systems of motor vehicles for compliance with quality standards and specifications;
- (v) Supervising pre-delivery inspection of automobiles, bicycles and other machinery and installations;
- (vi) Supervising inspection of garages for approval by the chief engineer;
- (vii) Supervising suitability test for drivers;
- (viii) Verifying spare parts and accessories;
- (ix) Carrying out valuation of motor vehicles and preparing reports;
- (x) Conducting pre/post repair inspection for costing and quality control;
- (xi) Supervising inspection of motor vehicles involved in accident for repairs and investigations;
- (xii) Supervising technical operations in the workshop;
- (xiii) Ensuring technical compliance, safety and quality control in provision of automotive mechanical engineering services;
- (xiv) Taking part in preparation of tender documents, development of specifications and technical evaluation;
- (xv) Preparing technical and progress reports pertaining to mechanical engineering services;
- (xvi) Keeping up to date records and inventory pertaining to automotive mechanical engineering; and
- (xvii) Preparing work plans and schedules; and
- (xviii) Mentoring staff working under the officer.

II. Motor Vehicles/Plant-Electrical

Duties and responsibilities will entail: -

- (i) implementing policies, regulations, standards, guidelines and strategies on automotive and plant electrical systems;
- (ii) supervising servicing and maintenance of electrical systems on motor vehicles, plant and equipment;
- (iii) supervising inspection, testing and examination of electrical systems on motor vehicles, plant and equipment;
- (iv) supervising installation and maintenance of communication systems and accessories on motor vehicles, plant and equipment;
- (v) diagnosing electrical faults in motor vehicles, plant and equipment;
- (vi) interpreting electrical wiring sketches and diagrams in motor vehicles, plant and equipment;
- (vii) supervising installation of electrical components and wiring in motor vehicles, plant and equipment;
- (viii) supervising pre-delivery inspection of automobiles, bicycles and other machinery and installations;
- (ix) verifying spare parts and accessories pertaining to automotive/plant electrical systems;
- (x) taking part in preparation of tender documents, development of specifications and technical evaluation;
- (xi) taking part in preparing technical reports pertaining to automotive/plant electrical systems;
- (xii) keeping up to date records and inventory pertaining to automotive/plant electrical systems;
- (xiii) preparing work plans and schedules; and
- (xiv) mentoring staff working under the officer.

(b) Job Specifications

For appointment to this grade, an officer must have:

- (i) At least twelve (12) years cumulative relevant work experience, three (3) of which should have been in the grade of Senior Engineering Technician, (Automotive);
- (ii) Technician Part III in Automotive Engineering or its equivalent qualifications from a recognized institution;
OR
Diploma in any of the following fields: Automotive Engineering, mechatronic engineering its equivalent qualification from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician;

- (iv) Valid annual practicing license from Kenya Engineering Technology Registration Board;
- (v) Certificate in supervisory Skills Course lasting not less than two (2) weeks from a recognized institution;
- (vi) Valid Driving License;
- (vii) Proficiency in computer applications; and
- (viii) Demonstrated merit and ability as reflected in work performance and results.

VI. SENIOR PRINCIPAL ENGINEERING TECHNICIAN (AUTOMOTIVE), CSG 7

(a) Job Descriptions

At this level the officer will be responsible to a senior officer at the Headquarters of the Mechanical and Transport Department.

An officer at this level will be deployed to any of the following functional areas:

- (i) Mechanical
- (ii) Motor Vehicles/Plant-Electrical

1. Mechanical

Duties and responsibilities will entail: -

- (i) Implementing policies, regulations, standards, guidelines and strategies pertaining to mechanical maintenance of vehicles;
- (ii) Overseeing diagnosis and analysis on motor vehicle mechanical parts, components and systems;
- (iii) Coordinating mechanical maintenance of motor vehicles;
- (iv) Supervising inspection of mechanical parts and systems of motor vehicles for compliance with quality standards and specifications;
- (v) Supervising pre-delivery inspection of automobiles, bicycles and other machinery and installations;
- (vi) Overseeing inspection of garages for approval by the chief engineer;
- (vii) Coordinating suitability test for drivers;
- (viii) Facilitating verification of spare parts and accessories;
- (ix) Coordinating valuation of motor vehicles;
- (x) Checking out valuation of motor vehicles reports;
- (xi) Supervising pre/post repair inspection for costing and quality control;
- (xii) Supervising inspection of motor vehicles involved in accident for repairs and investigations;
- (xiii) Coordinating technical operations in the workshop;
- (xiv) Ensuring technical compliance, safety and quality control in provision of automotive mechanical engineering services;
- (xv) Taking part in preparation of tender documents, development of specifications and technical evaluation;

- (xvi) Preparing technical and progress reports pertaining to automotive mechanical engineering services;
- (xvii) Managing fleet and logistics;
- (xviii) Ensuring/monitoring prudent utilization resources under the unit;
- (xix) Inculcating adoption of innovations and application of new technologies in the provision of automotive mechanical engineering services;
- (xx) Maintaining records and inventory pertaining to automotive mechanical engineering services;
- (xxi) Preparing work plans, schedules and budgets; and
- (xxii) Coaching and mentoring staff working under the officer.

2. Motor Vehicles/Plant-Electrical

Duties and responsibilities at this level will include: -

- (i) Implementing policies, regulations, standards, guidelines and strategies on automotive and plant electrical systems;
- (ii) Ensuring timely servicing and maintenance of electrical systems on motor vehicles, plant and equipment;
- (iii) Coordinating installation and maintenance of communication systems and accessories on motor vehicles, plant and equipment;
- (iv) Coordinating inspection, testing and examination of electrical systems on motor vehicles, plant and equipment;
- (v) Facilitating diagnosis on electrical faults in motor vehicles, plant and equipment;
- (vi) Interpreting electrical wiring sketches and diagrams in motor vehicles, plant and equipment;
- (vii) Supervising installation of electrical components and wiring in motor vehicles, plant and equipment;
- (viii) Coordinating pre-delivery inspection of automobiles, bicycles and other machinery and installations;
- (ix) Ensuring verification of spare parts and accessories pertaining to automotive/plant electrical systems;
- (x) Ensuring technical compliance, safety and quality control in provision of automotive/plant electrical systems;
- (xi) Taking part in preparation of tender documents, development of specifications and technical evaluation;
- (xii) Preparing technical reports pertaining to automotive/plant electrical systems;
- (xiii) Maintaining records and inventory pertaining to automotive/plant electrical systems;
- (xiv) Ensuring/monitoring prudent utilization resources under the unit;
- (xv) Maintaining records and inventory pertaining to automotive/plant electrical systems;
- (xvi) Inculcating adoption of innovations and application of new technologies in the provision of automotive/plant electrical services;
- (xvii) Preparing work plans, schedules and budgets; and

(xviii) Coaching and mentoring staff working under the officer.

(b) Job Specifications

For appointment to this grade, an officer must have:

- (i) At least fifteen (15) years cumulative relevant work experience, three (3) of which should have been in the grade of Principal Engineering Technician, (Automotive);
- (ii) Technician Part III in Automotive Engineering or its equivalent qualifications from a recognized institution;
OR
Diploma in any of the following fields: Automotive Engineering, mechatronic engineering its equivalent qualification from a recognized institution;
- (iii) Higher National Diploma in Mechanical Engineering or its equivalent qualification from a recognized institution;
- (iv) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician;
- (v) Valid annual practicing license from Kenya Engineering Technology Registration Board;
- (vi) Certificate in Supervisory skill course not lasting less than two (2) weeks from a recognized institution;
- (vii) Valid Driving License;
- (viii) Proficiency in computer applications; and
- (ix) Demonstrated outstanding professional competence and administrative ability as reflected in work performance and results.

2.8 CAREER GUIDELINE FOR ENGINEERING TECHNICIANS (PLANT)

2.8.1 FUNCTION

The Plant Engineering functions will be to:

- (i) Implement policies, regulations, standards, guidelines and strategies pertaining to plant and equipment;
- (ii) Diagnose and analyze plant and equipment, mechanical parts, hydraulic systems and under carriage;
- (iii) Maintenance of plant and equipment,
- (iv) Inspect mechanical parts, hydraulic systems and under carriage of plant and equipment for compliance with quality standards and specifications;
- (v) Pre-delivery inspection of plant, equipment and other machinery and installations;
- (vi) Conduct suitability test for plant operators;
- (vii) Verify plant and equipment spare parts and accessories;
- (viii) Conduct valuation of plant, equipment and other machinery;
- (ix) Undertake pre/post repair inspection for costing and quality control;
- (x) Conduct inspection of plant and equipment involved in accident for repairs and investigations;
- (xi) Take part in preparation of tender documents, development of specifications and technical evaluation; and
- (xii) Prepare technical reports pertaining to plant engineering services.

2.8.2 GRADING STRUCTURE AND SCOPE

(a) Grading Structure

The Career Guideline establishes six (6) grades of Engineering Technicians (Plant) who will be designated and graded as follows: -

Engineering Technician (Plant)

Designation	CSG
Engineering Technician (Plant) III	12
Engineering Technician (Plant) II	11
Engineering Technician (Plant) I	10
Senior Engineering Technician (Plant)	9
Principal Engineering Technician (Plant)	8
Senior Principal Engineering Technician (Plant)	7

(b) Conversion to the New Grading Structure

Serving officers will convert and adopt to the new grading structure and designations as follows: -

Conversion Table

Current Designation	Job Group	Proposed New Designation	CSG
Inspector (Mechanical)	'H'	Engineering Technician (Plant) II	12
Senior Inspector (Mechanical)	'J'	Engineering Technician (Plant) II	11
Superintendent (Mechanical)	'K'	Engineering Technician (Plant) I	10
Senior Superintendent (Mechanical)	'L'	Senior Engineering Technician (Plant)	9
Chief Superintendent (Mechanical)	'M'	Principal Engineering Technician (Plant)	8
Principal Superintendent (Mechanical)	'N'		
Senior Principal Superintendent (Mechanical)	'P'	Senior Principal Engineering Technician (Plant)	7

Note: The grade of Engineering Technician (Plant) III/II, CSG 12/11 will form common establishment for the purpose of this Career guideline.

2.8.3 RECOGNIZED QUALIFICATIONS

The following are the recognized qualifications for the purpose of this Career Guideline:

- Technician Certificate Part III in Mechanical Engineering or its equivalent qualifications from a recognized institution.
- Diploma in Mechanical Engineering in any of the following fields: Plant and Construction Plant or its equivalent qualification from a recognized institution.
- Higher National Diploma in Mechanical Engineering (Plant) or its equivalent from a recognized institution.
- Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician.
- Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician.
- Valid annual practicing license from Kenya Engineering Technology Registration Board.

- (vii) Certificate in Supervisory skill course not lasting less than two (2) weeks from a recognized institution.
- (viii) Valid Driving License.
- (ix) Proficiency in computer applications.

2.8.4 JOB AND APPOINTMENT SPECIFICATIONS

I. ENGINEERING TECHNICIAN (PLANT) III, CSG 12

(a) Job Descriptions

This will be the entry and training grade into this cadre. An officer at this level will work under the guidance of a designated supervisor. Duties and responsibilities will entail: -

- (i) Repairing minor faults in mechanical parts, hydraulic systems and under carriage in plant and equipment;
- (ii) Carrying out preventive/scheduled maintenance of plant and equipment for optimal performance;
- (iii) Taking part in inspection of plant, equipment and other machinery and installations;
- (iv) Collecting and collating data on plant and equipment valuation and serviceability reports; and
- (v) Updating records and inventory pertaining to plant engineering services.

(b) Job Specifications

For appointment to this grade, a candidate must have: -

- (i) Diploma in Mechanical Engineering in any of the following fields: Plant and Construction Plant its equivalent qualification from a recognized institution;
OR
Technician Certificate Part III in Mechanical Engineering or its equivalent qualifications from a recognized institution;
- (ii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iii) Valid Driving License; and
- (iv) Proficiency in computer applications.

II. ENGINEERING TECHNICIAN (PLANT) II, CSG 11

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) diagnosing and analyzing plant and equipment, mechanical parts, hydraulic systems and under carriage;
- (ii) performing preventive/scheduled and breakdown/corrective maintenance of plant and equipment for optimal performance;
- (iii) inspecting and testing plant and equipment before and after repair;
- (iv) carrying out inspection of mechanical parts, hydraulic systems and under carriage of plant and equipment for compliance with quality standards and specifications;
- (v) conducting pre-delivery inspection of plant, equipment and other machinery and installations;
- (vi) inspecting plant and equipment for boarding;
- (vii) undertaking suitability tests for plant operators;
- (viii) carrying out valuation of plant, equipment and other machinery and preparing reports; and
- (ix) updating records and inventory pertaining to plant engineering services.

(b) Job Specifications

For appointment to this grade, an officer must have:

- (i) Served for at least (3) years in the grade of Engineering Technician (Plant) III;
- (ii) Diploma in Mechanical Engineering in any of the following fields: Plant and Construction Plant its equivalent qualification from a recognized institution;
OR
Technician Certificate Part III in Mechanical Engineering or its equivalent qualifications from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iv) Valid driving License;
- (v) Proficiency in computer applications; and
- (vi) Shown merit and ability as reflected in work performance and results.

III. ENGINEERING TECHNICIAN (PLANT) I, CSG 10

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Diagnosing and analyzing plant and equipment, mechanical parts, hydraulic systems and under carriage;
- (ii) Performing preventive/scheduled and breakdown/corrective maintenance of plant and equipment for optimal performance;
- (iii) Inspecting and testing plant and equipment before and after repair;
- (iv) Carrying out inspection of mechanical parts, hydraulic systems and under carriage of plant and equipment for compliance with quality standards and specifications;

- (v) Conducting pre-delivery inspection of plant, equipment and other machinery and installations;
- (vi) Inspecting plant and equipment for boarding;
- (vii) Undertaking suitability tests for plant operators;
- (viii) Carrying out valuation of plant, equipment and other machinery and preparing reports; and
- (ix) Updating records and inventory pertaining to plant engineering services.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least six (6) years cumulative relevant work experience, three (3) of which should have been in the grade of Engineering Technician (Plant) II;
- (ii) Diploma in Mechanical Engineering in any of the following fields: Plant and Construction Plant its equivalent qualification from a recognized institution;
OR
Technician Certificate Part III in Mechanical Engineering or its equivalent qualifications from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iv) Valid driving License;
- (v) Proficiency in computer applications; and
- (vi) Shown merit and ability as reflected in work performance and results.

IV. SENIOR ENGINEERING TECHNICIAN (PLANT), CSG 9

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Diagnosing and analyzing plant and equipment, mechanical parts, hydraulic systems and under carriage;
- (ii) Supervising mechanical maintenance of plant and equipment;
- (iii) Inspecting mechanical parts, hydraulic systems and under carriage of plant and equipment for compliance with quality standards and specifications;
- (iv) Conducting pre-delivery inspection of plant, equipment and other machinery and installations;
- (v) Inspecting plant for repairing or boarding;
- (vi) Undertaking suitability tests for plant operators;
- (vii) Carrying out valuation of plant, equipment and other machinery and preparing reports;
- (viii) Conducting pre/post repair inspection of plant and equipment for costing and quality control;
- (ix) Carrying out inspection of plant and equipment involved in accident for repairs and investigations;

- (x) Supervising technical operations in the workshops;
- (xi) Analyzing data for preparation of technical reports;
- (xii) Updating records and inventory pertaining to plant engineering services; and
- (xiii) Preparing progress reports.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least nine (9) years cumulative relevant work experience, three (3) of which should have been in the grade of Engineering Technician, (Plant) I;
- (ii) Diploma in Mechanical Engineering in any of the following fields: Plant and Construction Plant its equivalent qualification from a recognized institution;
OR
Technician Certificate Part III in Mechanical Engineering or its equivalent qualifications from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iv) Valid Driving License;
- (v) Proficiency in computer applications; and
- (vi) Shown merit and ability as reflected in work performance and results.

V. PRINCIPAL ENGINEERING TECHNICIAN (PLANT), CSG 8

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Implementing policies, regulations, standards, guidelines and strategies pertaining to plant and equipment;
- (ii) Diagnosing and analyzing plant and equipment, mechanical parts, hydraulic systems and under carriage;
- (iii) Supervising mechanical maintenance of plant and equipment;
- (iv) Supervising inspection mechanical parts, hydraulic systems and under carriage of plant and equipment for compliance with quality standards and specifications;
- (v) Supervising pre-delivery inspection of plant, equipment and other machinery and installations;
- (vi) Taking part in installation, testing and commissioning of plant and equipment;
- (vii) Supervising suitability test for plant operators
- (viii) Verifying plant and equipment spare parts and accessories;
- (ix) Carrying out valuation of plant, equipment and other machinery and preparing reports;
- (x) Conducting pre/post repair inspection for costing and quality control;

- (xi) Supervising inspection of plant and equipment involved in accident for repairs and investigations;
- (xii) Supervising technical operations in the workshops;
- (xiii) Ensuring technical compliance, safety and quality control in provision of plant engineering services;
- (xiv) Taking part in preparation of tender documents, development of specifications and technical evaluation;
- (xv) Preparing technical and progress reports pertaining to plant engineering services;
- (xvi) Keeping up to date records and inventory pertaining to plant engineering;
- (xvii) Preparing work plans and schedules; and
- (xviii) Mentoring staff working under the officer.

(b) Job Specifications

For appointment to this grade, an officer must have:

- (i) At least twelve (12) years cumulative relevant work experience, three (3) of which should have been in the grade of Senior Engineering Technician, (Plant);
- (ii) Diploma in Mechanical Engineering in any of the following fields: Plant and Construction Plant its equivalent qualification from a recognized institution;
OR
Technician Certificate Part III in Mechanical Engineering or its equivalent qualifications from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician;
- (iv) Valid annual practicing license from Kenya Engineering Technology Registration Board;
- (v) Certificate in Supervisory skill course not lasting less than two (2) weeks from a recognized institution;
- (vi) Valid Driving License;
- (vii) Proficiency in computer applications; and
- (viii) Demonstrated merit and ability as reflected in work performance and results.

VI. SENIOR PRINCIPAL ENGINEERING TECHNICIAN (PLANT), CSG 7

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) implementing policies, regulations, standards, guidelines and strategies pertaining to plant and equipment;
- (ii) overseeing diagnosis and analysis on plant and equipment, mechanical parts, hydraulic systems and under carriage;
- (iii) coordinating mechanical maintenance of plant and equipment;

- (iv) supervising inspection mechanical parts, hydraulic systems and under carriage of plant and equipment for compliance with quality standards and specifications;
- (v) supervising pre-delivery inspection of plant, equipment and other machinery and installations;
- (vi) taking part in installation, testing and commissioning of plant;
- (vii) coordinating suitability test for plant operators;
- (viii) facilitating verification of plant and equipment spare parts and accessories;
- (ix) coordinating valuation of plant, equipment and other machinery;
- (x) supervising pre/post repair inspection for costing and quality control;
- (xi) supervising inspection of plant and equipment involved in accident for repairs and investigations;
- (xii) coordinating technical operations in the workshops;
- (xiii) ensuring technical compliance, safety and quality control in provision of plant engineering services;
- (xiv) taking part in preparation of tender documents, development of specifications and technical evaluation;
- (xv) preparing technical and progress reports pertaining to plant engineering services;
- (xvi) ensuring/monitoring prudent utilization resources under the unit;
- (xvii) inculcating adoption of innovations and application of new technologies in the provision of Plant engineering services;
- (xviii) maintaining records and inventory pertaining to plant engineering services;
- (xix) preparing work plans, schedules and budgets; and
- (xx) coaching and mentoring staff working under the officer.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least fifteen (15) years cumulative relevant work experience, three (3) of which should have been in the grade of Principal Engineering Technician, (Plant);
- (ii) Diploma in Mechanical Engineering in any of the following fields: Plant and Construction Plant its equivalent qualification from a recognized institution;
OR
Technician Certificate Part III in Mechanical Engineering or its equivalent qualifications from a recognized institution
- (iii) Higher National Diploma in Mechanical Engineering (Plant) or its equivalent from a recognised institution;
- (iv) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician;
- (v) Valid annual practicing license from Kenya Engineering Technology Registration Board;
- (vi) Certificate in Supervisory course lasting not less than two (2) weeks from a recognized institution;

- (vii) Valid Driving License;
- (viii) Proficiency in computer applications; and
- (ix) Demonstrated outstanding professional competence and administrative ability as reflected in work performance and results.

2.9 CAREER GUIDELINE FOR ENGINEERING TECHNICIANS, MECHANICAL (PRODUCTION)

2.9.1 FUNCTION

The Engineering Technician, Mechanical (Production) function will entail:

- (i) Implement policies, regulations, standards, guidelines and strategies pertaining to manufacturing and production;
- (ii) Undertake machining, welding, fabrication, heat treatment to facilitate manufacturing;
- (iii) Interpret drawings and mechanical blueprints;
- (iv) Set-up and operate production equipment;
- (v) Fabricate prototypes to validate design concepts;
- (vi) Take part in development of jigs & fixtures;
- (vii) Draft drawings, models and specifications under the guidance of engineers to ensure designs meet performance requirements and manufacturability;
- (viii) Conduct in-process and final products quality inspection in production and manufacturing processes to ensure compliance to standards;
- (ix) Undertake product sub-assemblies and final assemblies;
- (x) Generate and input programs, parameters and machine codes for production machinery and equipment;
- (xi) Take measurements and tolerances of rapid prototypes, reverse engineering and as built drawings;
- (xii) Calibrate and reference production machines;
- (xiii) Take part in preparation of tender documents, development of specifications and technical evaluation;
- (xiv) Prepare production documentation and reports; and
- (xv) Maintain records and inventory pertaining to production/manufacturing.

2.9.2 GRADING STRUCTURE AND SCOPE

(a) Grading Structure

The Career Guideline establishes six (6) grades of Engineering Technician, Mechanical (Production) who will be designated and graded as follows: -

Engineering Technician, Mechanical (Production)

Designation	CSG
Engineering Technician, Mechanical (Production) III	12
Engineering Technician, Mechanical (Production) II	11
Engineering Technician, Mechanical (Production) I	10
Senior Engineering Technician, Mechanical (Production)	9
Principal Engineering Technician, Mechanical (Production)	8
Senior Principal Engineering Technician, Mechanical (Production)	7

(b) Conversion to the New Grading Structure

Serving officers will convert and adopt to the new grading structure and designations as follows: -

Conversion Table

Current Designation	Job Group	New Designation	CSG
Inspector Mechanical (Production)	H	Engineering Technician, Mechanical (Production) III	12
Senior Inspector Mechanical (Production)	J	Engineering Technician, Mechanical (Production) II	11
Superintendent Mechanical (Production)	K	Engineering Technician, Mechanical (Production) I	10
Senior Superintendent Mechanical (Production)	L	Senior Engineering Technician, Mechanical (Production)	9
Principal Superintendent Mechanical (Production)	N	Principal Engineering Technician, Mechanical (Production)	8
Senior Principal Superintendent Mechanical (Production)	P	Senior Principal Engineering Technician, Mechanical (Production)	7

Note: The grade of Engineering Technician, Mechanical (Production) III/II, CSG 12/11 will form common establishment for the purpose of this Career guideline.

2.9.3 RECOGNIZED QUALIFICATIONS

The following are the recognized qualifications for the purpose of this career guideline:

- Technician Certificate Part III in Mechanical Engineering or its equivalent qualifications from a recognized institution.
- Diploma in Mechanical Engineering in any of the following options: Production, Welding and Fabrication, Material and Metallurgy or its equivalent qualification from a recognized institution.
- Higher National Diploma in Mechanical Engineering or its equivalent from a recognized institution.
- Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician.
- Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician.

- (vi) Valid annual practicing license from Kenya Engineering Technology Registration Board.
- (vii) Certificate in Supervisory skill course not lasting less than two (2) weeks from a recognized institution.
- (viii) Proficiency in computer applications.

2.9.4 JOB DESCRIPTIONS AND SPECIFICATIONS

I. ENGINEERING TECHNICIAN, MECHANICAL (PRODUCTION) III, CSG 12

(a) Job Descriptions

This will be the entry and training grade into this cadre. An officer at this level will be on-the-job-training and will work guidance designated supervisor. Duties and responsibilities will entail: -

- (i) Machining, welding, fabricating and heat-treatment to facilitate manufacturing;
- (ii) Taking part in interpreting drawings and mechanical blueprints;
- (iii) Operating production equipment;
- (iv) In-putting programs and parameters for production machinery and equipment;
- (v) Collecting data for preparation of production documentation and reports; and
- (vi) Collecting data and inventory pertaining to production/manufacturing.

(b) Job Specifications

For appointment to this grade, a candidate must have: -

- (i) Diploma in Mechanical Engineering in any of the following options: Production, Welding and Fabrication, Material and Metallurgy or its equivalent qualification from a recognized institution;
OR
Technician Certificate Part III in Mechanical Engineering or its equivalent qualifications from a recognized institution;
- (ii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician; and
- (iii) Proficiency in computer applications.

II. ENGINEERING TECHNICIAN, MECHANICAL (PRODUCTION) II, CSG 11

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Operating production equipment;
- (ii) Taking part in development of jigs & fixtures;
- (iii) Machining, welding, fabricating and heat-treatment to facilitate manufacturing;
- (iv) Interpreting drawings and mechanical blueprints;
- (v) Carrying out in-process quality inspection;
- (vi) Undertaking product sub-assemblies;
- (vii) In-putting programs, parameters and machine codes for production machinery and equipment;
- (viii) Compiling data for preparation of production documentation;
- (ix) Compiling data and inventory pertaining to production/manufacturing.

(b) Job Specifications

For appointment to this grade, an officer must have:

- (i) Served for at least three (3) years in the grade of Engineering Technician, Mechanical (Production) II;
- (ii) Diploma in Mechanical Engineering in any of the following options: Production, Welding and Fabrication, Material and Metallurgy or its equivalent qualification from a recognized institution;
OR
Technician Certificate Part III in Mechanical Engineering or its equivalent qualifications from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iv) Proficiency in computer applications; and
- (v) Shown merit and ability as reflected in work performance and results.

III. ENGINEERING TECHNICIAN, MECHANICAL (PRODUCTION) I, CSG 10

(b) Job Descriptions

Duties and responsibilities will entail:

- (i) Carrying out in-process quality inspection;
- (ii) Undertaking product sub-assemblies;
- (iii) Machining, welding, fabricating and heat-treatment to facilitate manufacturing;
- (iv) Interpreting drawings and mechanical blueprints;
- (v) Operating production equipment;
- (vi) Taking part in development of jigs & fixtures;
- (vii) In-putting programs, parameters and machine codes for production machinery and equipment;
- (viii) Referencing production machines;
- (ix) Compiling data for preparation of production documentation and reports;

- (x) Compiling data and inventory pertaining to production/manufacturing.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least six (6) years cumulative work experience, three (3) years in the grade of Engineering Technician, Mechanical (Production) II;
- (ii) Diploma in Mechanical Engineering in any of the following options: Production, Welding and Fabrication, Material and Metallurgy or its equivalent qualification from a recognized institution;
OR
Technician Certificate Part III in Mechanical Engineering or its equivalent qualifications from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iv) Proficiency in computer applications; and
- (v) Shown merit and ability as reflected in work performance and results.

IV. SENIOR ENGINEERING TECHNICIAN, MECHANICAL (PRODUCTION), CSG 9

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Machining, welding, fabricating and heat-treatment to facilitate manufacturing;
- (ii) Interpreting drawings and mechanical blueprints;
- (iii) Setting up and operating production equipment;
- (iv) Fabricating prototypes to validate design concepts;
- (v) Taking part in development of jigs & fixtures;
- (vi) Taking part in drafting drawings, models and specifications under the guidance of engineers to ensure designs meet performance requirements and manufacturability;
- (vii) Carrying out in-process and final products quality inspection in production and manufacturing processes to ensure compliance to standards;
- (viii) Undertaking product sub-assemblies and final assemblies;
- (ix) Generating and in-putting programs, parameters and machine codes for production machinery and equipment;
- (x) Taking measurements of rapid prototypes, reverse engineering and as-built drawings;
- (xi) Calibrating and referencing production machines;
- (xii) Analyzing data for preparation of production documentation and reports; and
- (xiii) Updating records and inventory pertaining to production/manufacturing.

(b) Job Specifications

For appointment to this grade, an officer must have:

- (i) At least nine (9) years cumulative relevant work experience, three (3) of which should have been in the grade of Engineering Technician, (Production) I;
- (ii) Diploma in Mechanical Engineering in any of the following options: Production, Welding and Fabrication, Material and Metallurgy or its equivalent qualification from a recognized institution;
OR
Technician Certificate Part III in Mechanical Engineering or its equivalent qualifications from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iv) Proficiency in computer applications; and
- (v) Shown merit and ability as reflected in work performance and results.

V. PRINCIPAL ENGINEERING TECHNICIAN (PRODUCTION), CSG 8

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Implementing policies, regulations, standards, guidelines and strategies pertaining to manufacturing and production;
- (ii) Supervising machining, welding, fabrication and heat-treatment to facilitate manufacturing;
- (iii) Interpreting drawings and mechanical blueprints;
- (iv) Supervising set-up and operation of production equipment;
- (v) Supervising fabrication prototypes to validate design concepts;
- (vi) Taking part in development of jigs & fixtures;
- (vii) Taking part in drafting drawings, models and specifications under the guidance of engineers to ensure designs meet performance requirements and manufacturability;
- (viii) Supervising in-process and final products quality inspection in production and manufacturing processes to ensure compliance to standards;
- (ix) Supervising product sub-assemblies and final assemblies;
- (x) Supervising generation and input programs, parameters and machine codes for production machinery and equipment;
- (xi) Taking measurements and tolerances of rapid prototypes, reverse engineering and as-built drawings;
- (xii) Supervising calibration and referencing production machines;
- (xiii) Taking part in preparation of tender documents, development of specifications and technical evaluation;
- (xiv) Preparing production documentation and reports;

- (xv) Keeping safe custody of records and inventory pertaining to production/manufacturing;
- (xvi) Adopting innovations and application of new technologies in production/manufacturing;
- (xvii) Preparing work plans and schedules; and
- (xviii) Mentoring staff working under the officer.

(b) Job Specifications

For appointment to this grade, an officer must have:

- (i) At least twelve (12) years cumulative relevant work experience, three (3) of which should have been in the grade of Senior Engineering Technician, (Production);
- (ii) Diploma in Mechanical Engineering in any of the following options: Production, Welding and Fabrication, Material and Metallurgy or its equivalent qualification from a recognized institution;
OR
Technician Certificate Part III in Mechanical Engineering or its equivalent qualifications from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician;
- (iv) Valid annual practicing license from Kenya Engineering Technology Registration Board;
- (v) Certificate in Supervisory skill course not lasting less than two (2) weeks from a recognized institution;
- (vi) Proficiency in computer applications; and
- (vii) Demonstrated merit and ability as reflected in work performance and results.

VI. SENIOR PRINCIPAL ENGINEERING TECHNICIAN, MECHANICAL (PRODUCTION), CSG 7

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Implementing policies, regulations, standards, guidelines and strategies pertaining to manufacturing and production;
- (ii) Coordinating machining, welding, fabrication, heat treatment to facilitate manufacturing;
- (iii) Interpreting drawings and mechanical blueprints;
- (iv) Coordinating set-up and operation of production equipment;
- (v) Coordinating fabrication prototypes to validate design concepts;
- (vi) Taking part in development of jigs & fixtures;

- (vii) Drafting drawings, models and specifications under the guidance of engineers to ensure designs meet performance requirements and manufacturability;
- (viii) Ensuring in-process and final products quality inspection in production and manufacturing processes to ensure compliance to standards;
- (ix) Supervising product sub-assemblies and final assemblies;
- (x) Coordinating generation and input programs, parameters and machine codes for production machinery and equipment;
- (xi) Facilitating taking of measurements and tolerances of rapid prototypes, reverse engineering and as-built drawings;
- (xii) Ensuring calibration and referencing production machines;
- (xiii) Taking part in preparation of tender documents, development of specifications and technical evaluation;
- (xiv) Preparing production documentation and reports;
- (xv) Maintaining records and inventory pertaining to production/manufacturing;
- (xvi) Ensuring technical compliance, safety and quality control in production/manufacturing processes;
- (xvii) Ensuring prudent utilization of materials, equipment and resources, under the unit;
- (xviii) Inculcating adoption of innovations and application of new technologies in production/manufacturing;
- (xix) Preparing work plans, schedules and budgets; and
- (xx) Coaching and mentoring staff working under the officer.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least fifteen (15) years cumulative relevant work experience, three (3) of which should have been in the grade of Principal Engineering Technician, (Production);
- (ii) Diploma in Mechanical Engineering in any of the following options: Production, Welding and Fabrication, Material and Metallurgy or its equivalent qualification from a recognized institution;

OR

- Technician Certificate Part III in Mechanical Engineering or its equivalent qualifications from a recognized institution;
- (iii) Higher National Diploma in Mechanical Engineering or its equivalent from a recognized institution.
- (iv) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician;
- (v) Certificate in Supervisory skill course not lasting less than two (2) weeks from a recognized institution;

- (vi) Valid annual practicing license from Kenya Engineering Technology Registration Board;
- (vii) Proficiency in computer applications; and
- (viii) Demonstrated outstanding professional competence and administrative ability as reflected in work performance and results.

2.10 CAREER GUIDELINE FOR ENGINEERING TECHNICIANS, (ELECTRICAL)

2.10.1 FUNCTION

The overall Engineering Technician, (Electrical) function will be to install, maintain and diagnose electrical, power, instrumentation, control and telecommunication systems. These include interpreting contracts and specifications, performing inspections, repairs, and testing, as well as providing technical support and ensuring compliance with industry standards and regulations.

The Electrical Engineering function will have three (3) components namely: -

- (i) Electrical Engineering Services;
- (ii) Electronics Engineering Services; and
- (iii) Electrical Power Development.

1. Electrical Engineering Services

The Electrical engineering function will be to: -

- (i) Implement policies, regulations, standards, guidelines and strategies pertaining to electrical engineering services in public facilities;
- (ii) Inspect, repair and maintain electrical controls related to fire detection equipment, cookers, water heaters, lifts, boilers, power generating plants and machinery in public facilities;
- (iii) Interpret electrical contracts and installation drawings and specifications;
- (iv) Make estimates for electrical installations in public facilities under the direction of electrical engineer
- (v) Install and test electrical equipment to ensure proper functionality and compliance with specifications and standards;
- (vi) Maintain, inspect, and troubleshoot electrical systems in public facilities;
- (vii) Ensure proper testing, calibration, and performance verification of electrical equipment in public facilities;
- (viii) Take part in preparation of design drawings and specifications;
- (ix) Operate electrical testing and diagnostic equipment.
- (x) Ensure technical compliance, safety and quality control electrical engineering services;
- (xi) Take part in preparation of tender documents, development of specifications and technical evaluation;
- (xii) Prepare electrical engineering services documentation and reports;
- (xiii) Maintain records and inventory pertaining to electrical engineering services;
- (xiv) Ensure prudent utilization of materials, equipment and resources, under the unit; and
- (xv) Prepare work plans, schedules and budgets.

2. Electronics Engineering Services

The Electronic engineering function will be to:

- (i) Implement policies, regulations, standards, guidelines and strategies pertaining to electronics engineering services;
- (ii) Inspect and maintain electronic equipment, control systems, telephone and communication systems in public facilities;
- (iii) Interpret contracts, installation drawings and specifications related to electronics control and telecommunication systems;
- (iv) Take part in preparation of design drawings and specifications in electronic engineering systems;
- (v) Install, configure and test electronic and telecommunication equipment to ensure compliance with specifications and standards;
- (vi) Diagnosis, inspection and maintenance electronic and telecommunication systems;
- (vii) Calibrate and verify performance of electronic, telecommunication and control systems;
- (viii) Supervise operation of electronic, telecommunication and control test and diagnosis equipment.
- (ix) Ensure technical compliance, safety and quality control in electronic, telecommunication and control engineering services;
- (x) Prepare estimates for electronics systems installations for public facilities under the direction of electrical engineer;
- (xi) Take part in preparation of tender documents, development of specifications and technical evaluation;
- (xii) Maintain up to date information, records and inventory pertaining to electronic engineering services;
- (xiii) Ensure prudent utilization of materials, equipment and resources, under the unit; and
- (xiv) Prepare work plans, schedules and budgets.

3. Electrical Power Development

The Electrical Power Development function will be to:

- (i) implement policies, regulations, standards, guidelines and strategies pertaining to power systems;
- (ii) diagnose, test and analyze the performance of power systems;
- (iii) install, calibrate and test power systems devices and related equipment;
- (iv) take part in integration of electrical power systems with other components of automation and process control;
- (v) resolve technical issues, faults, and malfunctions in power systems;
- (vi) prepare and maintain accurate documentation, records, and reports related to electrical power systems;

- (vii) interpret electrical power systems contracts, installation drawings and specifications;
- (viii) take part in preparation of design drawings and specifications under direction of engineers;
- (ix) control and account for electrical power systems maintenance materials and inventory; and
- (x) operate electrical power equipment and machinery to support power generation, transmission, and distribution activities.

2.10.2 GRADING STRUCTURE AND SCOPE

(a) Grading Structure

The career guideline establishes six (6) grades of Engineering Technician (Electrical) who will be designated and graded as follows: -

Engineering Technician (Electrical)

Designation	CSG
Engineering Technician (Electrical) III	12
Engineering Technician (Electrical) II	11
Engineering Technician (Electrical) I	10
Senior Engineering Technician (Electrical)	9
Principal Engineering Technician (Electrical)	8
Senior Principal Engineering Technician (Electrical)	7

(b) Conversion to the New Grading Structure

Serving officers will convert and adopt to the new grading structure and designations as follows: -

Conversion Table

Current Designation	Job Group	Proposed New Designation	CSG
Inspector (Electrical/Electronics)	H	Engineering Technician (Electrical) II	12
Senior Inspector (Electrical/Electronics)	J	Engineering Technician (Electrical) II	11
Superintendent (Electrical/Electronics)	K	Engineering Technician (Electrical) I	10
Senior Superintendent (Electrical/Electronics)	L	Senior Engineering Technician (Electrical)	9
Principal Superintendent (Electrical/Electronics)	N	Principal Engineering Technician (Electrical)	8

Senior Principal Superintendent (Electrical/Electronics)	P	Senior Principal Engineering Technician (Electrical)	7
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Note: The grade of Engineering Technicians III/II (Electrical), CSG 12/11 will form common establishment for the purpose of this Career guideline.

2.10.3 RECOGNIZED QUALIFICATIONS

The following are the recognized qualifications for the purpose of this Career Guideline: -

- (i) Diploma in any of the following disciplines: Electrical Engineering, Electronics Engineering, Electrical and Electronics Engineering or any other relevant and equivalent qualifications from a recognized institution.
- (ii) Higher National Diploma in any of the following disciplines: - Electrical Engineering, Electronics Engineering, Electrical and Electronics Engineering or any other relevant and equivalent qualifications from a recognized institution.
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician.
- (iv) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician.
- (v) Valid annual practicing license from Kenya Engineering Technology Registration Board.
- (vi) Certificate in Supervisory Skills Course not lasting less than two (2) weeks from a recognized institution.
- (vii) Proficiency in computer applications.

2.10.4 JOB AND APPOINTMENT SPECIFICATIONS

1. ENGINEERING TECHNICIAN (ELECTRICAL) III, CSG 12

(a) Job Descriptions

This is the entry grade for this cadre. An officer at this level will be on-the-job training and will work under guidance of a designated supervisor. An officer at this level will be deployed in any of the following functional areas:-

1. Electrical Engineering Services

Duties and responsibilities will entail:

- (i) Taking part in repairing and maintaining electrical controls related to fire detection equipment, cookers, water heaters, lifts, boilers, power generating plants and machinery in public facilities;

- (ii) Installing simple electrical equipment in compliance with specifications;
- (iii) Taking part in inspecting, troubleshooting, testing and performance verification of electrical equipment in public facilities;
- (iv) Operating electrical testing and diagnostic equipment; and
- (v) Collecting data, information, records and inventory pertaining to electrical engineering services.

2. Electronics Engineering Services

Duties and responsibilities will entail:

- (i) Taking part in inspection and maintenance of electronic equipment, control systems, telephone and communication systems in public facilities;
- (ii) Taking part in installation, configuration and testing of simple electronics, telecommunication and control components;
- (iii) Taking part in performance verification of electronic, telecommunication and control systems;
- (iv) Operating electronic, telecommunication and control test and diagnostic equipment; and
- (v) Collecting data, information, records and inventory pertaining to electronic, telecommunication and control services.

3. Electrical Power Development

Duties and responsibilities will entail:

- (i) Taking part in diagnosing and testing performance of power systems;
- (ii) Taking part in inspection and maintenance electrical power installations and distribution systems;
- (iii) Taking part in installation and testing power systems devices and related equipment;
- (iv) Attending to faults and malfunctions in power systems;
- (v) Operating electrical power equipment and machinery to support power generation, transmission, and distribution activities; and
- (vi) Collecting data, information, records and inventory pertaining to electrical power systems.

(b) Job Specifications

For appointment to this grade, a candidate must have:

- (i) Diploma in any of the following disciplines: Electrical Engineering, Electronics Engineering, Electrical and Electronics Engineering or any other relevant and equivalent qualifications from a recognized institution;
- (ii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician; and
- (iii) Proficiency in computer applications.

II. ENGINEERING TECHNICIAN (ELECTRICAL) II, CSG 11

(a) Job Descriptions

1. Electrical Engineering Services

Duties and responsibilities will entail: -

- (i) Inspecting, repairing and maintaining electrical controls related to fire detection equipment, cookers, water heaters, lifts, boilers, power generating plants and machinery in public facilities;
- (ii) Interpreting electrical contracts and installation drawings and specifications;
- (iii) Installing, configuring and testing of electrical equipment to ensure proper functionality and compliance with specifications and standards;
- (iv) Maintaining, inspecting, and troubleshooting of electrical systems in public facilities;
- (v) Testing, calibrating, and performing verification of electrical equipment in public facilities;
- (vi) Operating electrical testing and diagnostic equipment.
- (vii) Compiling data pertaining to electrical engineering services; and
- (viii) Collecting and collating data, information, records and inventory pertaining to electrical engineering services.

2. Electronics Engineering Services

Duties and responsibilities at this level will entail: -

- (i) Inspecting and maintaining electronic equipment, control systems, telephone and communication systems in public facilities;
- (ii) Interpreting contracts, installation drawings and specifications related to electronics control and telecommunication systems;
- (iii) Taking part in preparation of specifications in electronic engineering systems;
- (iv) Installing and testing electronic and telecommunication equipment to ensure compliance with specifications and standards;
- (v) Diagnosing, inspecting and maintaining electronic and telecommunication systems;
- (vi) Undertaking performance verification of electronic, telecommunication and control systems;
- (vii) Operating electronic, telecommunication and control test and diagnostic equipment; and
- (viii) Compiling data, information, records and inventory pertaining to electronic, telecommunication and control services.

3. Electrical Power Development

Duties and responsibilities will entail: -

- (i) diagnosing, testing and analyzing of performance of power systems;
- (ii) inspecting and maintaining electrical power installations and distribution systems;
- (iii) installing, calibrating and testing power systems devices and related equipment;
- (iv) resolving technical issues, faults and malfunctions in power systems;
- (v) interpreting electrical power systems contracts, installation drawings and specifications;
- (vi) operating electrical power equipment and machinery to support power generation, transmission, and distribution activities;
- (vii) taking part in development of specifications and preparation of technical reports; and
- (viii) compiling data, information, records and inventory pertaining to electrical power systems.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) Served at least three (3) years in the grade of Engineering Technician, (Electrical) III;
- (ii) Diploma in any of the following disciplines: -Electrical Engineering, Electronics Engineering, Electrical and Electronics Engineering or any other relevant and equivalent qualifications from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iv) Proficiency in computer applications; and
- (v) Shown merit and ability in work performance and results.

III. ENGINEERING TECHNICIAN (ELECTRICAL) I, CSG 10

(a) Job Descriptions

1. Electrical Engineering Services

Duties and responsibilities will entail: -

- (i) Inspecting, repairing and maintaining electrical controls related to fire detection equipment, cookers, water heaters, lifts, boilers, power generating plants and machinery in public facilities;
- (ii) Interpreting electrical contracts and installation drawings and specifications;

- (iii) Installing, configuring and testing of electrical equipment to ensure proper functionality and compliance with specifications and standards;
- (iv) Maintaining, inspecting, and troubleshooting of electrical systems in public facilities;
- (v) Testing, calibrating, and performing verification of electrical equipment in public facilities;
- (vi) Operating electrical testing and diagnostic equipment.
- (vii) Compiling data pertaining to electrical engineering services; and
- (viii) Collecting and collating data, information, records and inventory pertaining to electrical engineering services.

2. Electronics Engineering Services

Duties and responsibilities at this level will entail: -

- (i) Inspecting and maintaining electronic equipment, control systems, telephone and communication systems in public facilities;
- (ii) Interpreting contracts, installation drawings and specifications related to electronics control and telecommunication systems;
- (iii) Taking part in preparation of specifications in electronic engineering systems;
- (iv) Installing and testing electronic and telecommunication equipment to ensure compliance with specifications and standards;
- (v) Diagnosing, inspecting and maintaining electronic and telecommunication systems;
- (vi) Undertaking performance verification of electronic, telecommunication and control systems;
- (vii) Operating electronic, telecommunication and control test and diagnostic equipment; and
- (viii) Compiling data, information, records and inventory pertaining to electronic, telecommunication and control services.

3. Electrical Power Development

Duties and responsibilities will entail:

- (i) Diagnosing, testing and analyzing of performance of power systems;
- (ii) Inspecting and maintaining electrical power installations and distribution systems;
- (iii) Installing, calibrating and testing power systems devices and related equipment;
- (iv) Resolving technical issues, faults and malfunctions in power systems;
- (v) Interpreting electrical power systems contracts, installation drawings and specifications;
- (vi) Operating electrical power equipment and machinery to support power generation, transmission, and distribution activities;

- (vii) Taking part in development of specifications and preparation of technical reports; and
- (viii) Compiling data, information, records and inventory pertaining to electrical power systems.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least six (6) years cumulative relevant work experience, three (3) of which should have been in the grade of Engineering Technician, (Electrical) II;
- (ii) Diploma in any of the following disciplines: -Electrical Engineering, Electronics Engineering, Electrical and Electronics Engineering or any other relevant and equivalent qualifications from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iv) Proficiency in computer applications; and
- (v) Shown merit and ability in work performance and results.

IV. SENIOR ENGINEERING TECHNICIAN (ELECTRICAL), CSG 9

(a) Job Descriptions

1. Electrical Engineering Services

Duties and responsibilities will entail:

- (i) Inspecting, repairing and maintaining electrical controls related to fire detection equipment, cookers, water heaters, lifts, boilers, power generating plants and machinery in public facilities;
- (ii) Interpreting electrical contracts and installation drawings and specifications;
- (iii) Installing and testing of electrical equipment to ensure proper functionality and compliance with specifications and standards;
- (iv) Maintaining, inspecting, and troubleshooting of electrical systems in public facilities;
- (v) Testing, calibrating, and performing verification of electrical equipment in public facilities;
- (vi) Taking part in preparation of design drawings and specifications;
- (vii) Operating electrical testing and diagnostic equipment.
- (viii) Analyzing data pertaining to electrical engineering services; and
- (ix) Updating records and inventory pertaining to electrical engineering services;

2. Electronics Engineering Services

Duties and responsibilities will entail:

- (i) Inspecting and maintaining electronic equipment, control systems, telephone and communication systems in public facilities;
- (ii) Interpreting contracts, installation drawings and specifications related to electronics control and telecommunication systems;
- (iii) Taking part in preparation of design drawings and specifications in electronic engineering systems;
- (iv) Installing, configuring and testing of electronic and telecommunication equipment to ensure compliance with specifications and standards;
- (v) Diagnosing, inspecting and maintaining electronic and telecommunication systems;
- (vi) Calibrating and undertaking performance verification of electronic, telecommunication and control systems;
- (vii) Operating electronic, telecommunication and control test and diagnostic equipment.
- (viii) Taking part in preparing estimates for electronics systems installations for public facilities under the direction of electrical engineer;
- (ix) Analyzing and updating data, information, records and inventory pertaining to electronic, telecommunication and control services.

3. Electrical Power Development

Duties and responsibilities will entail:

- (i) Diagnosing, testing and analyzing of performance of power systems;
- (ii) Installing, calibrating and testing power systems devices and related equipment;
- (iii) Taking part in integration of electrical power systems with other components of automation and process control;
- (iv) Resolving technical issues, faults and malfunctions in power systems;
- (v) Updating information, records and inventory pertaining to electrical power systems;
- (vi) Interpreting electrical power systems contracts, installation drawings and specifications;
- (vii) Taking part in preparation of design drawings and specifications;
- (viii) Operating electrical power equipment and machinery to support power generation, transmission, and distribution activities;
- (ix) Taking part in preparation of estimates for electronics systems installations for public facilities under the direction of electrical engineer;
- (x) Taking part in development of specifications and preparation of technical reports; and
- (xi) Analyzing data, information and inventory pertaining to electrical power system.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least nine (9) years cumulative relevant work experience, three (3) of which should have been in the grade of Engineering Technician, (Electrical) I;
- (ii) Diploma in any of the following disciplines: Electrical Engineering, Electronics Engineering, Electrical and Electronics Engineering or any other relevant and equivalent qualifications from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iv) Valid annual practicing license from Kenya Engineering Technology Registration Board;
- (v) Proficiency in computer applications; and
- (vi) Demonstrated ability in work performance and results.

V. PRINCIPAL ENGINEERING TECHNICIAN (ELECTRICAL), CSG 8

(a) Job Descriptions

1. Electrical Engineering Services

Duties and responsibilities will entail:-

- (i) Implementing policies, regulations, standards, guidelines and strategies pertaining to electrical engineering services in public facilities;
- (ii) Supervising inspections, repair and maintenance of electrical controls related to fire detection equipment, cookers, water heaters, lifts, boilers, power generating plants and machinery in public facilities;
- (iii) Interpreting electrical contracts and installation drawings and specifications;
- (iv) Taking part preparing estimates for electrical installations in public facilities under the direction of electrical engineer;
- (v) Supervising installation and testing of electrical equipment to ensure proper functionality and compliance with specifications and standards;
- (vi) Supervising maintenance, inspections, and troubleshooting of electrical systems in public facilities;
- (vii) Supervising testing, calibration, and performance verification of electrical equipment in public facilities;
- (viii) Taking part in preparation of design drawings and specifications;
- (ix) Supervising operation of electrical testing and diagnostic equipment.
- (x) Taking part in preparation of tender documents, development of specifications and technical evaluation;
- (xi) Preparing electrical engineering services documentation and reports;
- (xii) Keeping up to date records and inventory pertaining to electrical engineering services;
- (xiii) Preparing work plans and schedules; and
- (xiv) Mentoring staff working under the officer.

2. Electronics Engineering Services

Duties and responsibilities will entail:

- (i) Implementing policies, regulations, standards, guidelines and strategies pertaining to electronics engineering services;
- (ii) Supervising inspection and maintenance of electronic equipment, control systems, telephone and communication systems in public facilities;
- (iii) Interpreting contracts, installation drawings and specifications related to electronics control and telecommunication systems;
- (iv) Taking part in preparation of design drawings and specifications in electronic engineering systems;
- (v) Supervising installation, configuration and testing of electronic and telecommunication equipment to ensure compliance with specifications and standards;
- (vi) Supervising diagnosis, inspection and maintenance electronic and telecommunication systems;
- (vii) Supervising calibration and performance verification of electronic, telecommunication and control systems;
- (viii) Supervising operation of electronic, telecommunication and control test and diagnosis equipment.
- (ix) Preparing estimates for electronics systems installations for public facilities under the direction of electrical engineer
- (x) Taking part in preparation of tender documents, development of specifications and technical evaluation;
- (xi) Keeping up to date information, records and inventory pertaining to electronic engineering services;
- (xii) Preparing work plans and schedules; and
- (xiii) Mentoring staff working under the officer.

3. Electrical Power Development

Duties and responsibilities will entail:

- (i) Implementing policies, regulations, standards, guidelines and strategies pertaining to power systems;
- (ii) Coordinating diagnosis, testing and analysis of performance of power systems;
- (iii) Supervising installation, calibration and testing power systems devices and related equipment;
- (iv) Taking part in integration of electrical power systems with other components of automation and process control;
- (v) Supervising resolution of technical issues, faults and malfunctions in power systems;
- (vi) Keeping up to date information, records and inventory pertaining to electrical power systems;

- (vii) Interpreting electrical power systems contracts, installation drawings and specifications;
- (viii) Taking part in preparation of design drawings and specifications;
- (ix) Supervising operation of electrical power equipment and machinery to support power generation, transmission, and distribution activities.
- (x) Taking part in preparing estimates for electronics systems installations for public facilities under the direction of electrical engineer;
- (xi) Taking part in preparation of tender documents, development of specifications and technical evaluation;
- (xii) Updating information, records and inventory pertaining to electrical power system;
- (xiii) Preparing work plans and schedules for the unit; and
- (xiv) Mentoring staff working under the officer.

(b) Job Specifications

For appointment to this grade, an officer must have:

- (i) At least twelve (12) years cumulative relevant work experience, three (3) of which should have been in the grade of Senior Engineering Technician, (Electrical);
- (ii) Diploma in any of the following disciplines: - Electrical Engineering, Electronics Engineering, Electrical and Electronics Engineering or any other relevant and equivalent qualifications from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician;
- (iv) Valid annual practicing license from Kenya Engineering Technology Registration Board;
- (v) Certificate in Supervisory Skills Course not lasting less than two (2) weeks from a recognized institution;
- (vi) Proficiency in computer applications; and
- (vii) Demonstrated ability in work performance and results.

VI. SENIOR PRINCIPAL ENGINEERING TECHNICIAN (ELECTRICAL), CSG 7

(a) Job Descriptions

An officer at this level will be responsible to a senior officer at the Headquarters and will be deployed in the following functional areas:

- (i) Electrical Engineering Services;
- (ii) Electronics Engineering Services; and
- (iii) Electrical Power Development.

1. Electrical Engineering Services

Duties and responsibilities will entail

- (i) Implementing policies, regulations, standards, guidelines and strategies pertaining to electrical engineering services in public facilities;
- (ii) Coordinating inspections, repair and maintenance electrical controls related to fire detection equipment, cookers, water heaters, lifts, boilers, power generating plants and machinery in public facilities;
- (iii) Interpreting electrical contracts and installation drawings and specifications;
- (iv) Making estimates for electrical installations in public facilities under the direction of electrical engineer
- (v) Coordinating installation and testing of electrical equipment to ensure proper functionality and compliance with specifications and standards;
- (vi) Ensuring maintenance, inspections, and troubleshooting of electrical systems in public facilities;
- (vii) Ensuring proper testing, calibration, and performance verification of electrical equipment in public facilities;
- (viii) Taking part in preparation of design drawings and specifications;
- (ix) Overseeing operation of electrical testing and diagnostic equipment.
- (x) Ensuring technical compliance, safety and quality control electrical engineering services;
- (xi) Taking part in preparation of tender documents, development of specifications and technical evaluation;
- (xii) Preparing electrical engineering services documentation and reports;
- (xiii) Maintaining records and inventory pertaining to electrical engineering services;
- (xiv) Ensuring prudent utilization of materials, equipment and resources, under the unit;
- (xv) Preparing work plans, schedules and budgets; and
- (xvi) Coaching and mentoring staff working under the officer.

2. Electronics Engineering Services

Duties and responsibilities will entail:

- (i) Implementing policies, regulations, standards, guidelines and strategies pertaining to electronics engineering services;
- (ii) Coordinating inspection and maintenance of electronic equipment, control systems, telephone and communication systems in public facilities;
- (iii) Interpreting contracts, installation drawings and specifications related to electronics control and telecommunication systems;
- (iv) Taking part in preparation of design drawings and specifications in electronic engineering systems;

- (v) Coordinating installation, configuration and testing of electronic and telecommunication equipment to ensure compliance with specifications and standards;
- (vi) Ensuring diagnosis, inspection and maintenance electronic and telecommunication systems;
- (vii) Ensuring calibration and performance verification of electronic, telecommunication and control systems;
- (viii) Supervising operation of electronic, telecommunication and control test and diagnosis equipment.
- (ix) Ensuring technical compliance, safety and quality control in electronic, telecommunication and control engineering services;
- (x) Preparing estimates for electronics systems installations for public facilities under the direction of electrical engineer;
- (xi) Taking part in preparation of tender documents, development of specifications and technical evaluation;
- (xii) Maintaining up to date information, records and inventory pertaining to electronic engineering services;
- (xiii) Ensuring prudent utilization of materials, equipment and resources, under the unit;
- (xiv) Preparing work plans, schedules and budgets; and
- (xv) Coaching and mentoring staff working under the officer.

3. Electrical Power Development

Duties and responsibilities will entail:

- (i) Implementing policies, regulations, standards, guidelines and strategies pertaining to power systems;
- (ii) Coordinating diagnosis, testing and analysis of performance of power systems;
- (iii) Ensuring installation, calibration and testing power systems devices and related equipment;
- (iv) Taking part in integration of electrical power systems with other components of automation and process control;
- (v) Overseeing resolution of technical issues, faults and malfunctions in power systems;
- (vi) Maintaining up to date information, records and inventory pertaining to electrical power systems;
- (vii) Interpreting electrical power systems contracts, installation drawings and specifications;
- (viii) Taking part in preparation of design drawings and specifications under direction of engineers;
- (ix) Coordinating operation of electrical power equipment and machinery to support power generation, transmission, and distribution activities.
- (x) Ensuring technical compliance, safety and quality control in electrical power engineering services;

- (xi) Preparing estimates for electronics systems installations for public facilities under the direction of electrical engineer;
- (xii) Taking part in preparation of tender documents, development of specifications and technical evaluation;
- (xiii) Maintaining up to date information, records and inventory pertaining to electrical power system;
- (xiv) Ensuring prudent utilization of materials, equipment and resources, under the unit;
- (xv) Preparing work plans, schedules and budgets for the unit; and
- (xvi) Coaching and mentoring staff working under the officer.

(b) Job Specifications

For appointment to this grade, an officer must have:

- (i) At least fifteen (15) years cumulative relevant work experience, three (3) of which should have been in the grade of Principal Engineering Technician, (Electrical);
- (ii) Diploma in any of the following disciplines: Electrical Engineering, Electronics Engineering, Electrical and Electronics Engineering or any other relevant and equivalent qualifications from a recognized institution;
- (iii) Higher National Diploma in any of the following disciplines: - Electrical Engineering, Electronics Engineering, Electrical and Electronics Engineering or any other relevant and equivalent qualifications from a recognized institution;
- (iv) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician;
- (v) Valid annual practicing license from Kenya Engineering Technology Registration Board;
- (vi) Certificate in Supervisory Skills Course not lasting less than two (2) weeks from a recognized institution;
- (vii) Proficiency in computer applications; and
- (viii) Demonstrated outstanding professional competence and administrative ability as reflected in work performance and results.

2.11 CAREER GUIDELINE FOR ENGINEERING TECHNICIANS (AGRICULTURAL)

2.11.1 FUNCTION

The Engineering Technician (Agricultural) function will be to: -

- (i) Implement policies, regulations, standards, guidelines and strategies pertaining to agricultural engineering services;
- (ii) Take part in preparation of engineering drawings for agricultural machinery, equipment and structures;
- (iii) Install and set-up agricultural machinery and equipment for optimal performance;
- (iv) Diagnose mechanical faults pertaining to agricultural machinery and equipment and implement solutions;
- (v) Conduct field demonstrations and training farmers on proper use, maintenance, safety protocol and safe operations of agricultural machinery and equipment;
- (vi) Support agricultural engineers in conducting experiments for innovation of new agricultural technologies, systems and processes in collaboration with other researchers;
- (vii) Provide support in automation of farming systems and tasks;
- (viii) Conduct operations in the agricultural engineering workshops;
- (ix) Fabricate, maintain and repair agricultural machinery and equipment;
- (x) Ensure agricultural product and processes meet regulatory standards;
- (xi) Take part in preparation of tender documents, development of specifications and technical evaluation;
- (xii) Prepare production documentation and reports; and
- (xiii) Establish and maintain records and inventory pertaining to agricultural engineering services.

2.11.2 GRADING STRUCTURE AND SCOPE

(a) Grading Structure

The Career Guideline establishes six (6) grades of Engineering Technicians (Agricultural) who will be designated and graded as follows: -

Engineering Technician (Agricultural)

Designation	CSG
Engineering Technician (Agricultural) III	12
Engineering Technician (Agricultural) II	11
Engineering Technician (Agricultural) I	10
Senior Engineering Technician (Agricultural)	9
Principal Engineering Technician (Agricultural)	8
Senior Principal Engineering Technician (Agricultural)	7

(b) Conversion to the New Grading Structure

Serving officers will convert and adopt to the new grading structure and designations as follows: -

Conversion Table

Current Designation	Job Group	New Designation	CSG
Inspector (Agriculture)	'H'	Engineering Technician (Agricultural) III	12
Senior Inspector (Agriculture)	'J'	Engineering Technician (Agricultural) II	11
Superintendent (Agriculture)	'K'	Engineering Technician (Agricultural) I	10
Senior Superintendent (Agriculture)	'L'	Senior Engineering Technician (Agricultural)	9
Chief Superintendent (Agriculture)	'M'	Principal Engineering Technician (Agricultural)	8
Principal Superintendent (Agriculture)	'N'		
Senior Principal Superintendent (Agriculture)	'P'	Senior Principal Engineering Technician (Agricultural)	7

Note: The grades of Engineering Technician (Agricultural) III/II, CSG 12/11 will form common establishment for the purpose of this career guideline.

2.11.3 RECOGNIZED QUALIFICATIONS

The following are the recognized qualifications for the purpose of this Career Guideline: -

- Technician Part III in any of the following disciplines: Agricultural Engineering, Soil and Water Engineering, Farm Power and Machinery, Irrigation and Drainage Engineering, Processing and Structures or its equivalent qualifications from a recognized institution;
- Diploma in any of the following disciplines: Agricultural Engineering, Soil and Water Engineering, Farm Power and Machinery, Irrigation and Drainage Engineering, Processing and Structures, or its equivalent qualifications from a recognized institution;
- Higher National Diploma in any of the following disciplines: Mechanical Engineering or any other relevant and equivalent qualifications from a recognized institution;
- Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Certified Engineering Technician;

- (vi) Valid annual practicing license from Kenya Engineering Technology Registration Board;
- (vii) Certificate in Supervisory Skills Course lasting not less than two (2) weeks from a recognized institution; and
- (viii) Proficiency in computer applications.

2.11.4 JOB DESCRIPTIONS AND SPECIFICATIONS

I. ENGINEERING TECHNICIAN (AGRICULTURAL) III, CSG 12

(a) Job Descriptions

This will be the entry and training grade into this cadre. An officer at this level will work under the guidance of a designated supervisor. Duties and responsibilities will entail: -

- (i) Carrying out routine services and maintenance of agricultural machinery and equipment;
- (ii) Taking part in minor installations and set-up of agricultural machinery and equipment for optimal performance;
- (iii) Repairing minor mechanical faults pertaining to agricultural machinery and equipment;
- (iv) Operating agricultural engineering workshops machinery and equipment;
- (v) Collecting data pertaining to agricultural engineering services; and
- (vi) Collecting data on records and inventory pertaining to agricultural engineering services.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) Diploma in any of the following disciplines: Agricultural Engineering, Soil and Water Engineering, Farm Power and Machinery, Irrigation and Drainage Engineering, Processing and Structures, Bio Systems and Environmental Engineering or its equivalent qualifications from a recognized institution;

OR

Technician Part III in any of the following disciplines: Agricultural Engineering, Soil and Water Engineering, Farm Power and Machinery, Irrigation and Drainage Engineering, Processing and Structures or its equivalent qualifications from a recognized institution;

- (ii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician; and
- (iii) Proficiency in computer application.

II. ENGINEERING TECHNICIAN (AGRICULTURAL) II, CSG 11

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Interpreting engineering drawings for agricultural machinery, equipment and structures;
- (ii) Installing and setting-up agricultural machinery and equipment for optimal performance;
- (iii) Diagnosing mechanical faults pertaining to agricultural machinery and equipment and implement solutions;
- (iv) Carrying out field demonstrations and training farmers and workers on proper use, maintenance, safety protocol and safe operations of agricultural machinery and equipment;
- (v) Carrying out routine maintenance of agricultural machinery and equipment;
- (vi) Providing input in automation of farming systems and tasks;
- (vii) Carrying out operations in agricultural engineering workshops;
- (viii) Maintaining and repairing agricultural machinery and equipment;
- (ix) Compiling data and information pertaining to agricultural engineering services; and
- (x) Collecting and collating data, records and inventory pertaining to agricultural engineering services.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) Served for at least (3) years in the grade of Engineering Technician (Agricultural) III;
- (ii) Diploma in any of the following disciplines: Agricultural Engineering, Soil and Water Engineering, Farm Power and Machinery, Irrigation and Drainage Engineering, Processing and Structures, Bio Systems and Environmental Engineering or its equivalent qualifications from a recognized institution;
OR
Technician Part III in any of the following disciplines: Agricultural Engineering, Soil and Water Engineering, Farm Power and Machinery, Irrigation and Drainage Engineering, Processing and Structures or its equivalent qualifications from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iv) Proficiency in computer applications; and
- (v) Shown merit and ability as reflected in work performance and results

III. ENGINEERING TECHNICIAN (AGRICULTURAL) I, CSG 10

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Diagnosing mechanical faults pertaining to agricultural machinery and equipment and implement solutions;
- (ii) Carrying out field demonstrations and training farmers and workers on proper use, maintenance, safety protocol and safe operations of agricultural machinery and equipment;
- (iii) Interpreting engineering drawings for agricultural machinery, equipment and structures;
- (iv) Installing and setting-up agricultural machinery and equipment for optimal performance;
- (v) Carrying out routine maintenance and repairs of agricultural machinery and equipment;
- (vi) Providing input in automation of farming systems and tasks;
- (vii) Carrying out operations in agricultural engineering workshops;
- (viii) Maintaining and repairing agricultural machinery and equipment;
- (ix) Compiling data and information pertaining to agricultural engineering services;
- (x) Carrying out operations in agricultural engineering workshops; and
- (xi) Compiling data and information pertaining to inventory of agricultural engineering services.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least six (6) years cumulative relevant work experience, three (3) of which should have been in the grade of Engineering Technician (Agricultural) II;
- (ii) Diploma in any of the following disciplines: Agricultural Engineering, Soil and Water Engineering, Farm Power and Machinery, Irrigation and Drainage Engineering, Processing and Structures, Bio Systems and Environmental Engineering or its equivalent qualifications from a recognized institution;
OR
Technician Part III in any of the following disciplines: Agricultural Engineering, Soil and Water Engineering, Farm Power and Machinery, Irrigation and Drainage Engineering, Processing and Structures or its equivalent qualifications from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;

- (iv) Proficiency in computer applications; and
- (v) Shown merit and ability as reflected in work performance and results.

IV. SENIOR ENGINEERING TECHNICIAN (AGRICULTURAL), CSG 9

(a) Job Descriptions

Duties and responsibilities at this level will entail:

- (i) Taking part in preparation of engineering drawings for agricultural machinery, equipment and structures;
- (ii) Interpreting engineering drawings for agricultural machinery, equipment and structures;
- (iii) Installing and setting-up agricultural machinery and equipment for optimal performance;
- (iv) Conducting assessment in diagnosis of mechanical faults pertaining to agricultural machinery and equipment and implement solutions;
- (v) Carrying out field demonstrations and training farmers and workers on proper use, maintenance, safety protocol and safe operations of agricultural machinery and equipment;
- (vi) Carrying out routine maintenance of agricultural machinery and equipment;
- (vii) Working with agricultural engineers in conducting experiments for innovation of new agricultural technologies, systems and processes in collaboration with other researchers;
- (viii) Providing input in automation of farming systems and tasks;
- (ix) Carrying out operations in agricultural engineering workshops;
- (x) Fabricating, maintaining and repairing of agricultural machinery and equipment;
- (xi) Analyzing data and information pertaining to agricultural engineering services; and
- (xii) Updating records and inventory pertaining to agricultural engineering services.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least nine (9) years cumulative relevant work experience, three (3) of which should have been in the grade of Engineering Technician, (Agricultural) I;
- (ii) Diploma in any of the following disciplines: Agricultural Engineering, Soil and Water Engineering, Farm Power and Machinery, Irrigation and Drainage Engineering, Processing and Structures, Bio Systems and Environmental Engineering or its equivalent qualifications from a recognized institution;
OR
Technician Part III in any of the following disciplines: Agricultural Engineering, Soil and Water Engineering, Farm Power and Machinery, Irrigation and

- Drainage Engineering, Processing and Structures or its equivalent qualifications from a recognized institution;
- (iii) Registration by the Kenya Engineering Technology Registration Board (KETRB) as a Candidate Engineering Technician;
- (iv) Proficiency in computer applications; and
- (v) Shown merit and ability as reflected in work performance and results.

V. PRINCIPAL ENGINEERING TECHNICIAN (AGRICULTURAL), CSG 8

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Implementing policies, regulations, standards, guidelines and strategies pertaining to agricultural engineering services;
- (ii) Taking part in preparation of engineering drawings for agricultural machinery, equipment and structures;
- (iii) Interpreting engineering drawings for agricultural machinery, equipment and structures;
- (iv) Supervising installation and set-up agricultural machinery and equipment for optimal performance;
- (v) Coordinating assessment in diagnosis of mechanical faults pertaining to agricultural machinery and equipment and implement solutions;
- (vi) Supervising field demonstrations and training farmers on proper use, maintenance, safety protocol and safe operations of agricultural machinery and equipment;
- (vii) Supervising routine services and maintenance of agricultural machinery and equipment;
- (viii) Providing support to agricultural engineers in conducting experiments for innovation of new agricultural technologies, systems and processes in collaboration with other researchers;
- (ix) Providing support in automation of farming systems and tasks;
- (x) Supervising operations in the agricultural engineering workshops;
- (xi) Supervising fabrication, maintenance and repairing of agricultural machinery and equipment;
- (xii) Taking part in preparation of tender documents, development of specifications and technical evaluation;
- (xiii) Preparing agricultural engineering documentation and reports;
- (xiv) Keeping up to date records and inventory pertaining to agricultural engineering services;
- (xv) Preparing work plans and schedules; and
- (xvi) Mentoring staff working under the officer.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least twelve (12) years cumulative relevant work experience, three (3) of which should have been in the grade of Senior Engineering Technician (Agricultural);
- (ii) Diploma in any of the following disciplines: Agricultural Engineering, Soil and Water Engineering, Farm Power and Machinery, Irrigation and Drainage Engineering, Processing and Structures, Bio Systems and Environmental Engineering or its equivalent qualifications from a recognized institution;
OR
Technician Part III in any of the following disciplines: Agricultural Engineering, Soil and Water Engineering, Farm Power and Machinery, Irrigation and Drainage Engineering, Processing and Structures or its equivalent qualifications from a recognized institution;
- (iii) Registration by Kenya Engineering Technologists and Technicians Registration Board (KETRB) as a certified Engineering Technician;
- (iv) Valid annual practicing license from Kenya Engineering Technology Registration Board;
- (v) Certificate in Supervisory Skills Course lasting not less than two (2) weeks from a recognized institution;
- (vi) Proficiency in computer applications; and
- (vii) Shown merit and ability as reflected in work performance and results.

VI. SENIOR PRINCIPAL ENGINEERING TECHNICIAN (AGRICULTURAL), CSG 7

(a) Job Descriptions

Duties and responsibilities will entail: -

- (i) Implementing policies, regulations, standards, guidelines and strategies pertaining to agricultural engineering services;
- (ii) Taking part in preparation of engineering drawings for agricultural machinery, equipment and structures;
- (iii) Interpreting engineering drawings for agricultural machinery, equipment and structures;
- (iv) Coordinating installation and set-up agricultural machinery and equipment for optimal performance;
- (v) Spearheading assessment in diagnosis of mechanical faults pertaining to agricultural machinery and equipment and implement solutions;
- (vi) Coordinating field demonstrations and training farmers on proper use, maintenance, safety protocol and safe operations of agricultural machinery and equipment;
- (vii) Supporting agricultural engineers in conducting experiments for innovation of new agricultural technologies, systems and processes in collaboration with other researchers;
- (viii) Providing support in automation of farming systems and tasks;
- (ix) Supervising operations in the agricultural engineering workshops;

- (x) Overseeing fabrication, maintenance and repairing of agricultural machinery and equipment;
- (xi) Ensuring technical compliance, safety and quality control agricultural engineering services;
- (xii) Taking part in preparation of tender documents, development of specifications and technical evaluation;
- (xiii) Preparing agricultural engineering documentation and reports;
- (xiv) Maintaining records and inventory pertaining to agricultural engineering services;
- (xv) Ensuring prudent utilization of materials, equipment and resources, under the unit;
- (xvi) Preparing work plans, schedules and budgets; and
- (xvii) Coaching and mentoring staff working under the officer.

(b) Job Specifications

For appointment to this grade, an officer must have: -

- (i) At least fifteen (15) years cumulative relevant work experience, three (3) of which should have been in the grade of Principal Engineering Technician (Agricultural);
- (ii) Diploma in any of the following disciplines: Agricultural Engineering, Soil and Water Engineering, Farm Power and Machinery, Irrigation and Drainage Engineering, Processing and Structures, Bio Systems and Environmental Engineering or its equivalent qualifications from a recognized institution;
OR
Technician Part III in any of the following disciplines: Agricultural Engineering, Soil and Water Engineering, Farm Power and Machinery, Irrigation and Drainage Engineering, Processing and Structures or its equivalent qualifications from a recognized institution;
- (iii) Higher National Diploma in any of the following disciplines: Mechanical Engineering or any other relevant and equivalent qualifications from a recognized institution;
- (iv) Registration by Kenya Engineering Technologists and Technicians Registration Board (KETRB) as a certified Engineering Technician;
- (v) Valid annual practicing license from Kenya Engineering Technology Registration Board;
- (vi) Certificate in Supervisory Skills Course lasting not less than two (2) weeks from a recognized institution;
- (vii) Proficiency in computer applications; and
- (viii) Demonstrated outstanding professional competence and administrative ability as reflected in work performance and results.