

| Group Level | Skill Number | Skill | Complement Per Office | Prerequisites | Duties | Rank | Training | Measurements |
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| All Core | 6LS1 | Operational Technical Support | 2 | 4LS1,4LS2, 4LS4, 2LS12, 4LS5 | (Knowledge of all technical aspects as related to L&S operations and the ability to relate these together in problem solving.) | 3 | Min. 1 year OJT using Mentor (<i>Many skills necessary for the acquisition of this skill would be developed as the technician progressed in lower levels.</i>) | At completion of 1 year of OJT, conduct an evaluation interview to determine if the employee can relate all technical aspects of day to day operations. Assessment will be assessing the employees ability to analyze, assess, and trouble-shoot problems. Successful completion will be determined by supervisor's observation. Within a 1 year duration, technician will compile a report of 2 specific incidences in which they analyzed operational problems, isolated the cause and effect, developed corrective action, communciated the solution to subordinates and assisted with implementation. The supervisor will review presented incidences and determine compliance. |
| All Core | 6LS2 | Departmental / Organizational Operational Knowledge | 2 | 4LS1,4LS2 | Applications of Engineering/Surveying principles as they relate to NCDOT operations | 3 | Attend Course "NCDOT Organizational Structure and related Customers" - TO BE DEVELOPED! Many skills necessary for the acquisition of this skill would be developed as the technician progressed in lower levels. Min. 1 year OJT | Employee will satisfactorily represent the unit in 3 Field Plan Inspections over a period of not less than 1 years based on supervisor's observation. At completion of 1 year of OJT, supervisor will complete an evaluation review form. Supervisor will be assessing the employees ability to satisfactorily relate Unit responsibilities and organizational relationships based on a standardized test. Successful completion will be determined by supervisor's observation. |

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| Field Core PDC Core No GTS | 6LS3 | Project Administration | 2 | 4LS1,4LS2, 4LS4 | (includes QA/QC, application of policies and procedures and implementation) | 3 | Min. 1 year OJT using Mentor with standardized guidelines <i>(Many skills necessary for the acquisition of this skill would be developed as the technician progressed in lower levels.)</i> | At completion of 1 year of OJT, conduct an evaluation interview. Supervisor will be assessing the employees ability to satisfactorily complete 5 assigned projects over a period of 1 year by supervisor's observation and standardized expectation forms. Proposed Field Guideline for Standardized Expectation Form: Employee will review requests to see if they can be completed using established procedures by the project deadline, satisfactorily establish the scope of work, provide manhour input for TE I and TES I to assist in negotiations, perform field checks, advise supervisors on work methods and check all electronic files for 5 projects at each completion over a period of 1 year. Employee to keep portfolio of projects (i.e. bi- weekly reports, redlined electronic files or other pertinent data) needed to establish that projects were satisfactorily completed by the deadline. |
| Field Core PDC Core | 6LS4 | Office Management (Leadership) | 2 | 4LS3 OR 4LS6 | Serve as Asst. Group Leader | 3 | Supervision for Managers and Professionals (MGT 201). Attend the PM training class. Other Supervisor and Management courses to be determined and recommended by upper management. Min. 1 year OJT . Many skills necessary for the acquisition of this skill would be developed as the technician progressed in lower levels. | Successful completion of recommended courses. Proposed Guideline for Evaluation Form: Technician will complete 4 different Performance Reviews and then compare it with the supervisor's form. Successful completion will be determined by supervisor's observation. Successful completion of test based on Personnel Manual Policies. Technician must attend all interviews for a lower level technician position & complete PO 600s to be compared with supervisor's forms for completeness, objectivity & accuracy. Successful completion will be based on supervisor's observation. |

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| Field Core PEF Core | 6LS5 | Contract Administration | 2 | 4LS1,4LS2, 4LS4 | Scoping, Estimating, Negotiating, and Reviewing Projects with Private Engineering Firms | 3 | Min. 1 year OJT with Mentor. Introduction to Negotiations (ADM 658) | Employee will assist PEF Coordinator and PEF TE I's in process of writing and executing each of the different types of Limited Services Agreements used by Unit for 1 contract cycle. Employee will satisfactorily demonstrate skill in updating contract fee schedules, reviewing invoices, reviewing contracts and writing purchase orders by Supervisor's observation. Employee will demonstrate the ability to scope, estimate manhours, and review data on 3 projects (2 Conventional/GPS, 1 SUE, 1 Vangarde or RAW). Employee will keep records of pertinent information (portfolio of redlined plots, manhour estimates, biweekly reports, records of all communication with PEF etc. to be reviewed by supervisor upon each project completion using project evaluation form. |
| GTS Core | 6LS6 | Research and Development of New Equipment Needs/ New Software/Equipment Applications and Workflow Integration | 3 (GTS) 1 (Others) | 99HR2 (OJT) | | 3 | Min. 1 year OJT with Mentor. Some skills necessary for the acquisition of this skill would be developed as the technician progressed in lower levels. | Upon completion of a performance review of Survey Hardware/Software, requested by Management, technician will compile a report, detailing criteria utilized for the performance review, the results/ conclusions of the review, and a possible implementation plan. Evaluation review form to be completed by supervisor's observation. |
| GTS Core Field AO PEF AO PDC AO | 99HR3 | Level 2 Trainer (Formalized Classroom Training) | 3 (GTS) Unit Specific (Others) | 99HR2 (OJT) | Formalized Office/Group Process & Procedure Training | 4 | Getting Started (ADM 600), On the Job Training (ADM 605), | Successful completion of training classes. At completion of conducting 3 formal training classes, supervisor conducts an evaluation interview to discuss the employee's progression in training others. Interview will include a standardized evaluation form provided by the SBP/CBP Training Coordinator. Successful completion will be determined by supervisor's observation. |
| Field AO Field Core PEF AO GTS AO | 6LS8 | Establishment of Control Networks | 3 | 3LS9, 4LS5 | (Adjustments, Localization, GPS, and Conv. Control) | 4 | Min. 1 year OJT with Mentor. A1-5 should be pre-requisite for Field Technicians. Require Advanced Route Location course as a pre-requisite. Coord. Utilization Course - Applications/Computations. Least Squares Analysis/Survey Adjustment Course. Geodesy for Laymen Course. Trimble Geomatics Office/Static Course. | Completion of various training courses. Employee will successfully participate in a lead role in the completion of 2 control survey projects. Successful participation will be determined by supervisor's completion of evaluation review form. |

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| All AO | 6LS9 | Special Survey Applications | 2 Unit Specific | 6LS1, 6LS2 | Non-typical applications of Survey to NCDOT or Other Govt. Agencies | 3 | Some skills necessary for the acquisition of this skill would be developed as the technician progressed in lower levels. Specialized technical courses on specific survey applications based on Unit needs. | Employee will demonstrate the ability to scope, estimate and negotiate manhours on 2 non conforming projects requiring specialized surveying techniques. These non conforming projects will be identified by the employee and approved by the employee's supervisor in advance. Employee will keep records of pertinent information (portfolio of redlined plots, manhour estimates, biweekly reports, records of all communication with PEF etc. to be reviewed by supervisor upon project completion with standard evaluation review form. |
| All AO | 6LS10 | Technical Assistance for Unit-wide Procedural Development | 3 (GTS) Unit Specific (Others) | 3LS5, 6LS1, 6LS2 | | 3 | Some skills necessary for the acquisition of this skill would be developed as the technician progressed in lower levels. Min. 1 year OJT with Mentor. Either Effective Writing Techniques (ADM 715) or Effective Writing Skills for Technical Employees (TEC 200) | Within a 1 year duration, Technician will compile a descriptive report containing an incident where he/she provided input into Unit-wide standards. Evaluation review form. |
| All AO | 6LS11 | Level 3 PSD/Property Development (Legal Aspects of Property Mapping) | 2 | 4LS8 | Higher Level (Most Complex) Determination of Boundary Locations, Involving Legal Interpretation and/or Non-mathematical Applications | 4 | Require Level 2 PSD Development as a prerequisite. Legal Aspects of Boundary Law .Min. 1 year using Mentor (PLS Certification may be accepted in lieu of Legal Aspects... and 1 year w/ mentor) . Condemnation class (to be developed) & written test that addresses: basic condemnation trial procedures; basic Legal terminology; tactics employed by opposing attorney's; etc. | Satisfactorily complete the Condemnation class and pass the associated test. (Employee will be prepared to act as an expert witness, but does not need to testify to prove they have this skill.) Technician will compile a portfolio of 5 PSD complex revisions, detailing the decisions as to why the revisions are necessary (i.e. Property discrepancy, existing RW discrepancy, Plan/RW revision, etc.) The portfolio is to be initialed and approved by supervisor utilizing standardized evaluation form. |

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| All AO | 6LS12 | Level 4 Work Zone Safety (Unit Wide) | 2 | 4LS4 | Accident/Incident Investigation and Review | 2 | Advanced Work Zone Safety (SAF 510). Accident & Incident Investigation (SAF 125). Other Lead Worker Safety courses to be determined and recommended by upper management. Min. 1 year OJT using Mentor with standardized guidelines. Require Level 3 Work Zone Safety as a prerequisite | Employee will demonstrate the ability to design workzones and perform worksite audits by keeping a portfolio of at least 5 work zones satisfactorily designed over a period of not less than 1 year, and by keeping a log of not less than 6 audit reports satisfactorily written as the result of actual field audits performed over a period of not less than 1 year. Successful completion of various recommended Safety courses. At completion of 1 year of OJT, conduct an evaluation interview. Interview will include a standardized evaluation form to be determined by upper management. Successful completion will be determined by supervisor's observation. Supervisor will review safety audits conducted by technician on various projects and safety record. |
| GTS Core | 6LS13 | Level 3 Trainer (Design and Develop Course) | 3 (GTS) Unit Specific (Others) | 99HR2 (OJT) 99HR3 | Design and Develop Formal Courses to be taught by self/others | 4 | Getting Started (ADM 600), On the Job Training (ADM 605), Facilitator Training (ADM 610), Design Skills (ADM 620) Presentation Skills (ADM 635), Effective Writing Techniques (ADM 715), Managing Multiple Priorities (MGT 575), Managing Information (MGT 615), PowerPoint (Com 330 & 340). | Successful completion of training classes. At completion of developing 3 training classes, supervisor conducts a final evaluation interview. Supervisor will be assessing the employee's ability to satisfactorily compile and organize training materials. Successful completion will be determined by supervisor's observation and evaluation form. |
| Specific Comp - Any Level | 6LS14 | Rock Climbing | Unit Specific | | Rock climb/rappel in instances where normal modes of transportation are insufficient to reach areas of concern in survey/mapping | 3 | In-house training class for 8 hour duration. | Successful completion of rappelling training course and certification by NCDOT certified Climb/Rappel instructor. |
| Specific Comp - Any Level | 6LS15 | Deep Water Navigation | Unit Specific | | Maintain and operate boat in coastal waters (Sounds, Ocean) | 3 | US Coast Guard Deep Water Navigation Course | Successful completion of course |
| All Add-on | 6LS 16 | Laser Scan Field Data Collection | 2 per office | | Collect/review field data via Laser Scanner, utilizing proper pre-established procedures | 4 | Laser Scanning Field Procedures - TO BE DEVELOPED | Satisfactory completion of 3 separate laser scanning projects |
| GTS/PEF Add-on | 6LS 17 | Laser Scanner Processing | All | | Process Laser Scan data for utilization by others | 5 | Vendor Laser Scan Processing Class, | Feedback from Course Instructor, Successful completion of 3 separate scans processed |