KANSAS STATE BOARD OF TECHNICAL PROFESSIONS

900 SW Jackson Street, Suite 507, Topeka, KS 66612
(785) 296-3053 | https://ksbtp.ks.gov

APPLICATION FOR
FUNDAMENTALS OF SURVEYING EXAM APPLICATION

INSTRUCTIONS: Applicants should read all statutes, rules and regulations for specific details regarding requirements. All statutes, rules & regulations are available on our website.

- ◊ This application is to determine eligibility for the Fundamentals of Surveying exam and Certification as an Intern Surveyor. **DO NOT** register with NCEES until you receive your approval letter from the KSBTP.
- ◊ Each applicant shall meet one of the following requirements for admission before taking the examination. (1) Graduation from an accredited surveying curriculum, as defined in K.A.R. 66-9-5(b), (c), and (d); (2) successful completion of the surveying curriculum specified in K.A.R. 66-9-5(e); **or** (3) verification of a combination of education and experience of a character satisfactory to the board. See *Table of Requirements for Surveyor Examinations* on Page 6.
- ◊ See our Professional Surveyor's page for more information on the exams required for Kansas licensure including the Kansas State Specific.

A COMPLETE APPLICATION WILL INCLUDE THE FOLLOWING:

1. **COMPLETED APPLICATION FORM** — Print completed form, sign and date, then send all information to KSBTP. Pending applications are kept on file for one year.
2. **TRANSCRIPTS —** Send an "official," sealed transcript or have the school send a transcript directly to KSBTP. Do not send photocopies or unsealed transcripts. Foreign degrees must be evaluated by NCEES. (See Special Instructions listed below.)
3. **SURVEYING EXPERIENCE —** Applicants applying under K.A.R. 66-11-5(b)(3) must supply an experience record and reference. Supply verification of only the minimum required number of years of experience, even if more experience is acquired. In order to receive experience credit, any surveying work experience after May 1, 1988, must have been supervised by a licensed surveyor.
4. **PROFESSIONAL REFERENCES —** Each experience engagement listed on the professional experience record must be verified by a supervisor. The number of references may be as few as one if you have had only one engagement with one supervisor. Complete the Classification of Tasks worksheet (if applicable) starting on Page 7. Professional reference forms must be returned directly to the Board office from the reference. The Reference Forms may be 'handwritten.'
5. **EDUCATION —** Applicants should carefully review the table of requirements on Page 6. Applicants who are graduates of an accredited 4-year or an accredited 2-year surveying curriculum or have completed the surveying curriculum specified in K.A.R. 66-9-5(e) must complete Page 2 of this application and provide official transcripts.

Application is not complete until the application and supporting documentation have been received by the board office. Only complete applications will be submitted to the Board for evaluation. Applicant will be notified in writing of Board action.

MAIL COMPLETE APPLICATION FILE TO KSBTP AT ADDRESS LISTED ABOVE.
Handwritten or incomplete forms will NOT be accepted.

SPECIAL INSTRUCTIONS FOR APPLICANTS WITH BACCALAUREATE SURVEYING DEGREES FROM OUTSIDE THE UNITED STATES: Any applicant with a surveying degree from outside the United States must have that degree evaluated before educational credit may be considered by the Board. See Table of Requirements on Page 6 for information regarding education requirements for surveying and see K.A.R. 66-9-5 concerning surveying curriculum approved by the board. Foreign degrees must be evaluated by NCEES.

NCEES CREDENTIALS EVALUATIONS | www.ncees.org | Phone: 1-800-250-3196 or (864) 654-6824
Request a report be sent to KSBTP

NOTE: All questions regarding the evaluation of your degree should be directed to NCEES.

- The Board will make the final determination of the education requirement per K.A.R. 66-9-5.
- Send degree materials as soon as possible as a thorough evaluation of educational credentials may take several months.

Keep a copy of this application for your records.

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APPLICATION FOR
FUNDAMENTALS OF SURVEYING EXAM APPLICATION

1. GENERAL INFORMATION:

Name: _____ Maiden Name: _____
(First/Middle/Last)

Social Security #: _____ Date of Birth: _____ Preferred Mailing:

Home Address: _____
(Exam Results mailed to this address) (Street Address) (City) (State) (Zip)

Cell: _____ Work: _____ Email: _____

Business Name: _____ Business Address: _____
(Street Address) (City) (State) (Zip)

2. EDUCATION:

Official Transcripts are: ◯ Enclosed ◯ School will send

*We will **NOT** accept unofficial transcripts, unsealed transcripts or photocopies/faxed copies.

Name & Location of Institution	Dates Attended	Date Graduated	Degree Received (i.e. BS Civil Engineering)

3. EXAM HISTORY:

List all Fundamentals of Surveying NCEES exams taken. As per K.A.R. 66-8-6, "any applicant for a license…who fails an examination on the first attempt may take the examination two additional times…"

Type of Certificate or Exam	Original State	Date of Exam	NCEES Exam (Yes/No)	PASS or FAIL	License or Certificate Number	Date License Issued
Fundamentals of Surveying Exam						

4. SIGNATURE:

Have you ever been convicted of a felony, or had any disciplinary or administrative action taken against your license in another jurisdiction? ◯ Yes ◯ No | ◯ Felony ◯ Disciplinary ◯ Admin Action

If **YES**, please attach a letter of explanation & supporting documentation.

I HEREBY CERTIFY THAT ALL STATEMENTS IN THIS APPLICATION ARE TRUE AND CORRECT.

_____ _____
Signature Date

APPLICANT NAME: _____

PROFESSIONAL EXPERIENCE RECORD FOR SURVEYING

Applicants who have graduated from either an accredited 4-year engineering curriculum or a 4-year related science curriculum are required to have 2 years of surveying experience before applying to take the Fundamentals of Surveying Exam. This experience can be either "basic" or "progressive." List only the minimum required number of years of experience.

Any credit for experience must be verified by a supervisor. Surveying work performed after May 1, 1988, must be under the direct supervision of a licensed surveyor, per K.A.R. 66-10-12(a)(1)(B).

INSTRUCTIONS:

1. In chronological order beginning with first engagement, enter month and year of engagement. Do NOT use "Present". The letter (a) designates first experience engagement. Letter subsequent engagements consecutively with (b), (c), etc.
2. State the title of the position along with the name and address of employer. Surveying experience must be explained in detail giving specific examples. If employed by more than one employer, each is considered a separate engagement. Use a separate form for each engagement. Complete additional forms and print as needed. If surveying experience was interrupted by work in other fields, illness, military service, etc., complete the form titled "Non-Surveying Employment" (Page 4).
3. Enter the name of the supervisor who will verify each engagement. Send reference forms (Pages 11-12) and a copy of the experience record to each individual listed. Each surveying engagement must be verified to obtain credit. Supply one reference for each experience engagement.
4. Refer to the information regarding Survey Experience of a Character Satisfactory to the Board and Classification of Tasks for Progressive Surveying Experience (Pages 5-10), to determine how to categorize work experience. Enter the amount of time spent in (1) basic surveying and (2) progressive surveying. Use years/months, for example: 3 years, 4 months.

Engagement: _____ Position(s) Held: _____

Employer Name: _____

Employer Address: _____

Supervisor Name: _____ Supervisor License #: _____

Dates (MM/YY): From _____ To _____

Experience:

(1) Basic Survey Time: _____ (maximum 2 years)

(2) Progressive Survey Time: _____

****TO REPORT ADDITIONAL EXPERIENCE, PRINT THIS FORM, CLEAR IT, AND ENTER NEXT ENGAGEMENT(S).**

NON-SURVEYING EMPLOYMENT/UNEMPLOYMENT

APPLICANT NAME:_____

Engagement: _____ Position:_____

Dates (Month & Year): From _____ To _____

Engagement: _____ Position:_____

Dates (Month & Year): From _____ To _____

Engagement: _____ Position:_____

Dates (Month & Year): From _____ To _____

Engagement: _____ Position:_____

Dates (Month & Year): From _____ To _____

TOTAL NON-SURVEYING TIME: _____

REFERENCE SUMMARY FORM
Please list the name and license number of the supervisor that will be verifying each engagement:

ENGAGEMENT (a,b,c, etc.)	NAME OF REFERENCE	PROFESSIONAL LICENSE NUMBER

NOTE: Supervisor must be licensed in order to receive credit for any experience after May 1, 1988.

SURVEY EXPERIENCE OF A CHARACTER SATISFACTORY TO THE BOARD

The Kansas Board has determined that a certain amount of surveying experience must consist of "Progressive" surveying experience. The following guidelines shall be used to assign credit for work experience:

Progressive surveying experience may include the following eight (8) elements of professional surveying: project management; research; measurements and locations; computations and analysis; legal principles and reconciliation; land planning and design; monumentation; and documentation and land information systems. These guidelines closely follow the NCEES guidelines which were developed from a comprehensive task analysis of work performed by licensed professional surveyors throughout the country. NOTE: It is not necessary to have experience in all eight (8) elements to qualify for the FS.

1. **PROJECT MANAGEMENT** – A surveyor should have a knowledge of: Prevailing professional standards, practices and ethics; being able to communicate with clients, contractors, government agencies, etc.; dealing with administrative problems concerning selection of appropriate control and necessary data for a project; estimating required time and materials; selecting safety standards and policies; determining what supervisory controls, priorities, interpersonal relations, record documentation and procedures to use; and managing drafting work, survey and computer use.

2. **RESEARCH** – A surveyor should have a knowledge of how and where to obtain information necessary to complete a project and the relevance of various information to a particular application, including: land records, land descriptions, soils and vegetation, rules of evidence, court decisions, regulations, riparian determinations, highway maps and plans, land title, real property acquisition, rights of way, workplans, standards, policies and procedures.

3. **MEASUREMENTS AND LOCATIONS** – A surveyor should have a knowledge of various measurement techniques and mathematics involved such as: title surveys, topographic surveys, plane and geodetic surveys, boundary determinations, taping, leveling, electronic distance measurement, horizontal and vertical control, direction, traverse, triangulation, trilateration, stadia, celestial observations and error balancing and reduction techniques; also have a knowledge of use and maintenance of surveying and related equipment such as: tape, transit, theodolite, electronic distance measuring (EDM) equipment, total stations, level, rods, compass, photogrammetric equipment, plumb bob, odometers, etc.; and be able to understand and conform with codes and standards.

4. **COMPUTATIONS AND ANALYSIS** – A surveyor should have a knowledge of: mathematics including algebra, trigonometry, geometry and statistics; computational techniques including computer application and usage associated with accuracy, traverse, triangulation, trilateration, differential and trigonometric leveling, angles and directions, geographic position, public land system, state plane coordinates, errors and adjustments, horizontal and vertical curves, photogrammetry, earthwork quantities, plane and geodetic surveys, area, volume, and construction layout; and analyzing data and evidence using computations, prevailing professional standards, judgment and legal standards, land titles, survey plats and parcel descriptions.

5. **LEGAL PRINCIPLES AND RECONCILIATION** – A surveyor should have knowledge of legal principles applicable to: real estate, surveying, mapping and contract law, resolution of conflicts through analyzing data and records, court decisions and land title, standards, policies and procedures, rules of evidence and land descriptions.

6. **LAND PLANNING AND DESIGN** – A surveyor should have a knowledge of: basic land planning (including lot and street layout), general requirements for land development, determine constraining factors which may limit development, earthwork quantities, required control, plans and maps, computations for design and layout, horizontal and vertical control, photogrammetric mapping, topographic surveys, boundary information, land ownership and planning and zoning.

7. **MONUMENTATION** – A surveyor should have a knowledge of: vertical and horizontal monumentation, types and priorities of existing monumentation, placement or replace of monuments, determination of validity of existing natural or manmade monumentation, lost or obliterated corners and monuments of record, the use of highway plans or survey plats for information on monumentation, construction layout and boundary determination.

8. **DOCUMENTATION AND LAND INFORMATION SYSTEMS** – A surveyor should have a knowledge of: maintaining records, preparing maps and plats, documenting field and record evidence, writing property descriptions, drafting techniques, standards and regulations. A surveyor should also have knowledge of: vertical and horizontal monumentation, types and priorities of existing monumentation, placement or replacement of monuments, determination of validity of existing natural or manmade monumentation, lost or obliterated corners and monuments of record, the use of highway plans or survey plats for information on monumentation, construction layout and boundary determination.

Basic surveying experience is considered by the Board to include surveying experience which is normally identified with engineering projects. This would include construction staking, curb and gutter projects, sanitary sewers, and design surveys for highways or bridges other than those that relate to right-of-way surveys.

TABLE OF REQUIREMENTS FOR PROFESSIONAL SURVEYOR EXAMINATION

This table is provided only as a guideline. All educational credit must be verified by transcripts.

	Credit Allowed for Education (In Years)	Maximum Credit Allowed for "Basic" Surveying Experience (In Years)	Minimum "Progressive" Surveying Experience Required (In Years)	**Total Education & Experience Required for FS Exam**	Maximum Credit Allowed for "Basic" Surveying Experience (In Years)	Minimum "Progressive" Surveying Experience Required (In Years)	**Total Education & Experience Required for PS Exam**
I. Graduate of accredited 4-year surveying curriculum (K.A.R. 66-9-5(b))	4 (K.A.R. 66-10-10a(a))			**4**		4	**8**
II. Graduate of Board-approved 2-year surveying curriculum (K.A.R. 66-9-5(c)) or completion of surveying curriculum specified in K.A.R. 66-9-5(e)	2 (K.A.R. 66-10-10a(b))			**2**	2**	4	**8**
III. Graduate of accredited 4-year engineering curriculum (K.A.R. 66-9-5(a)) or graduate of 4-year related science curriculum* (K.A.R. 66-9-5(d))	2 (K.A.R. 66-10-10)	2		**4**		4	**8**
IV. Applicant with 12 semester hours survey curriculum (K.A.R. 66-9-5(f))***		2	2	**4**		4	**8****

* Related Science Curriculum – Degrees in subjects that are related to surveying may include geology, math, chemistry, and physics.

** The total number of years of experience must be six (6). All six years could be in "progressive" surveying. The maximum "basic" experience allowed is two (2) years, but there is no minimum requirement for "basic" surveying experience.

*** K.A.R. 66-9-5(f): successful completion of at least 12 semester hours of approved surveying coursework consisting of three (3) semester hours in each of the following, from a school or college approved by the Board: (1) surveying measurements and analysis; (2) global positioning system (GPS) surveying techniques; (3) real property law; and (4) boundary control and legal principles.

**** The total number of years of experience must be eight (8). All eight years could be in "progressive" surveying. The maximum "basic" experience allowed is two (2) years, but there is no minimum requirement "basic" surveying experience.

APPLICANT NAME: _____

CLASSIFICATION OF TASKS
FOR "PROGRESSIVE" SURVEYING EXPERIENCE

Enter a checkmark under the appropriate engagement indicating the element and tasks in which you obtained experience. It is not required that each block be completed for each engagement as you may not have received experience in all areas. To qualify for the FS Exam, you are not required to show experience in each element on this list.

ELEMENTS & TASKS — **ENGAGEMENT EXPERIENCE**

1. PROJECT MANAGEMENT

1. Advise clients of potential problems.
2. Consult with clients/owners and clients' attorneys.
3. Determine procedures to comply with ethical conduct.
4. Plan monument recovery.
5. Determine required levels of precision and order of accuracy.
6. Select appropriate vertical and/or horizontal datum.
7. Process documents and maps requiring approval through government agencies.
8. Determine basis for bearings.
9. Contact adjacent land owners regarding boundary or entry rights.

A	B	C	D	E	F	G	H

2. RESEARCH

1. Research prior survey, maps, field notes and aerial photos.
2. Research deeds.
3. Research record survey files and indices.
4. Research governmental records, rules, regulations and statutes.
5. Research road, railroad and utility plans and records.
6. Consult with other surveyors.
7. Research grantor/grantee indices.
8. Obtain previous land development plans.
9. Research title company records and reports.
10. Gather parol evidence.
11. Research court records and reports.
12. Research assessors records
13. Research case law.

A	B	C	D	E	F	G	H

3. MEASUREMENTS AND LOCATIONS

1. Locate existing monumentation.
2. Retrace boundary lines.
3. Perform angular and linear measurement.
4. Perform boundary surveys of vacant and/or improved parcels.
5. Calibrate instruments.
6. Recover horizontal and vertical control.
7. Determine locations of man-made and natural objects.
8. Perform topographic surveys.
9. Perform construction staking.
10. Perform route & right-of-way surveys for roads, railroads or utilities.
11. Obtain data with total station.
12. Perform as-built surveys of constructed improvements.
13. Perform differential leveling.
14. Perform water boundary surveys.
15. Perform ALTA/NSPS surveys.
16. Establish photogrammetric control points.
17. Perform photogrammetric control surveys.
18. Perform trigonometric leveling.
19. Perform flood plain surveys.
20. Perform condominium surveys.
21. Perform geodetic surveys.

A	B	C	D	E	F	G	H

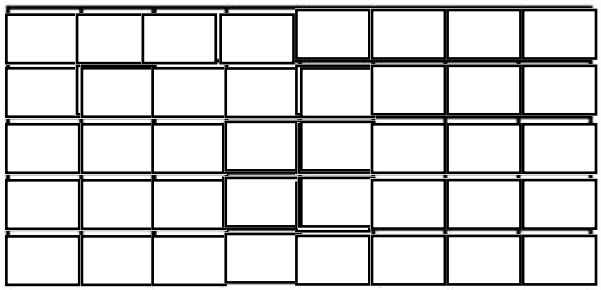
4. COMPUTATIONS AND ANALYSIS

1. Compare researched records with field data.
2. Compute coordinate values.
3. Verify field notes for completeness and accuracy.
4. Analyze existing control.
5. Compute and review closures and adjust traverse.
6. Compute areas.
7. Prepare work sheets of surveys for final drafting & boundary determinations.
8. Adjust field measurements.
9. Analyze sources of error.

A	B	C	D	E	F	G	H

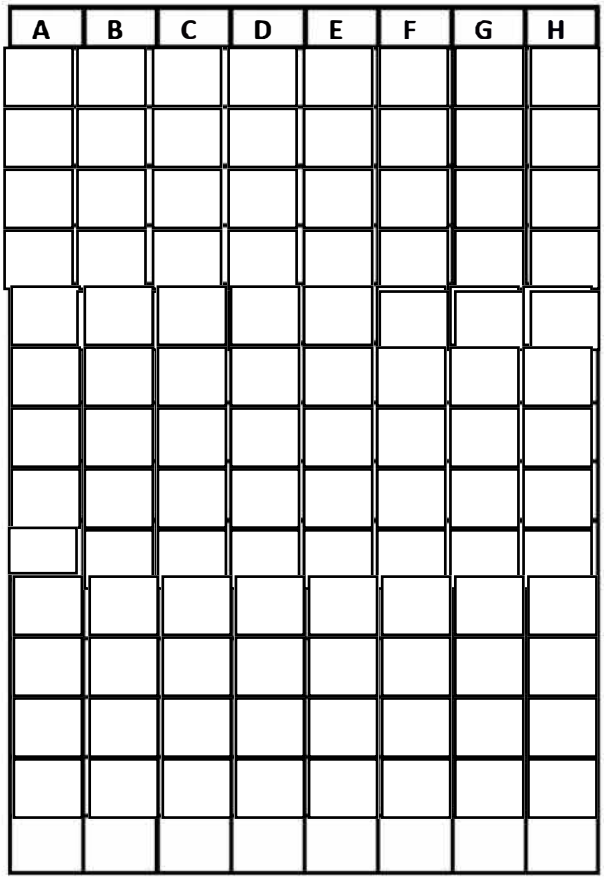
APPLICANT NAME: _____

10. Adjust coordinates to appropriate datum.
11. Evaluate parol evidence.
12. Determine positional tolerances.
13. Compute volumes.
14. Compute astronomic azimuths.



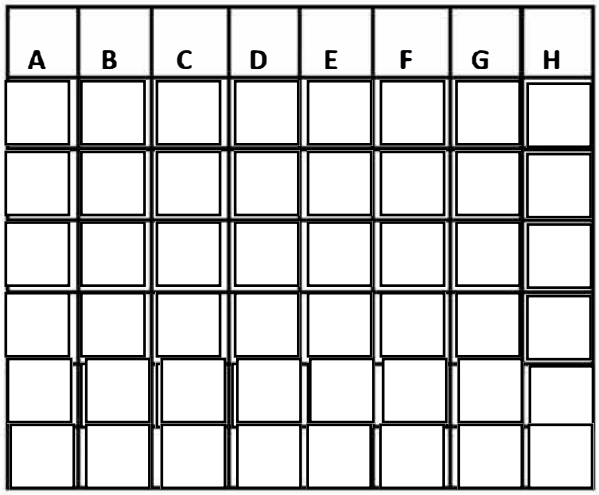
5. LEGAL PRINCIPLES AND RECONCILIATION

1. Compare researched records with field data
2. Identify boundary line discrepancies.
3. Reconcile records and field evidence.
4. Reconcile conflicting deed descriptions
5. Determine location of easements.
6. Consider the priority of calls.
7. Identify field conditions for evidence of possession.
8. Advise clients regarding boundary uncertainties.
9. Determine potential adverse possession claims.
10. Apply Public Land Survey System principles.
11. Identify riparian boundaries.
12. Review documents for clients and/or attorneys.
13. Identify littoral boundaries.
14. Testify as an expert witness.



6. LAND PLANNING AND DESIGN

1. Design horizontal alignment for roads within a subdivision.
2. Determine easement constraints.
3. Determine subdivision development requirements.
4. Determine and prepare lot and street patterns for land division.
5. Design vertical alignment for roads within a subdivision.
6. Determine flood plain limits.



7. MONUMENTATION

1. Set monuments.
2. Perpetuate existing monumentation.
3. Describe monuments.
4. Establish benchmarks.
5. Reference monuments.
6. Select monument types.

A	B	C	D	E	F	G	H

8. DOCUMENTATION AND INFORMATION SYSTEM

1. Prepare boundary survey maps.
2. Prepare land descriptions.
3. Prepare final plats and land division plats.
4. Prepare and file record of survey.
5. Prepare topographic and contour maps.
6. Perpetuate records for monuments and benchmarks.
7. Prepare easement plats.
8. Prepare sketch and/or preliminary plats.
9. Prepare right-of-way maps.
10. Prepare "as-built" maps.
11. Prepare and file corner records.
12. Document potential possession claims.
13. Prepare ALTA/NSPS survey maps.
14. Prepare condominium plats.

A	B	C	D	E	F	G	H

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NOTICE OF **REFERENCE REQUEST**

APPLICANT INFORMATION: (To be completed by APPLICANT)

1. APPLICANT NAME: _____

2. Date for form to reach KSBTP: _____

Reference Name: _____

Reference Address: _____

To the Reference: The applicant listed above has given your name as a supervisor or one who is acquainted with one or more experience engagements listed in the experience record form accompanying this reference form. This Board is required by law to obtain evidence of the technical ability of applicants for certification. Statements by responsible individuals with personal knowledge of the applicant's qualifications will be considered as evidence. Additional information may be attached. The Reference Form may be 'handwritten'. Please write legibly.

The Board would like to emphasize that evidence submitted on this form must not be perfunctory nor made for the mere purpose of aiding the applicant to be certified. The execution of this statement will be accepted by the Board as a deliberate act made with full knowledge of the responsibility to protect the public health, safety and welfare. It should be borne in mind that the applicant is not being considered for membership in an organization but for certification as an Intern Surveyor in Kansas.

Since the Board cannot process this application until receipt of this reference, a prompt reply will expedite the handling of the application. **Your professional seal is required on this form. If you have no seal, please send a copy of your license.**

THIS INFORMATION WILL BE TREATED IN THE STRICTEST CONFIDENCE.

The **REFERENCE FORM FOR EXPERIENCE VERIFICATION** (which should be enclosed with this Notice) is to be returned directly to the board office:

KANSAS STATE BOARD OF TECHNICAL PROFESSIONS
900 SW JACKSON, SUITE 507
TOPEKA, KS 66612

KANSAS STATE BOARD OF TECHNICAL PROFESSIONS

900 SW Jackson Street, Suite 507, Topeka, KS 66612
(785) 296-3053 | https://ksbtp.ks.gov

REFERENCE FORM FOR EXPERIENCE VERIFICATION

APPLICANT NAME: _____

1. Are you a licensed/registered professional engineer or professional surveyor? _____
   LIST LICENSE NUMBER(S) AND STATE(S): _____
2. What time period did you know the applicant well? FROM _____(mm/yy) TO _____ (mm/yy).
3. What was your job relationship? ◯ Supervisor ◯ Fellow Employee ◯ Other_____
4. Are you related to the applicant? ◯ Yes ◯ No
5. Please give in brief your opinion of the applicant's capabilities in surveying and any other comments.

   _____

   _____

6. Please read the enclosed experience record form. Indicate the engagement with which you are familiar and provide information.
   a. Engagement being verified (a, b, c, etc. from applicant's experience record): _____
   b. Your position and company name for engagement being verified: _____

      _____
   c. Has applicant accurately described his/her participation in engagement? _____
   d. Did applicant demonstrate work experience in the eight (8) required elements of "progressive" land surveying experience?

1. Project Management	◯ Yes	◯ No
2. Research	◯ Yes	◯ No
3. Measurements and Locations	◯ Yes	◯ No
4. Computations and Analysis	◯ Yes	◯ No
5. Legal Principles and Reconciliation	◯ Yes	◯ No
6. Land Planning and Design	◯ Yes	◯ No
7. Monumentation	◯ Yes	◯ No
8. Documentation & Land Information Systems	◯ Yes	◯ No

I HEREBY CERTIFY THE ABOVE INFORMATION IS TRUE AND CORRECT.

REFERENCE NAME: _____ PHONE: _____

TITLE: _____ EMAIL: _____

COMPANY NAME: _____

PROFESSIONAL SEAL

SIGN & DATE

_____ _____

SIGNATURE DATE