



## **GEOTECHNICAL REPORT CHECKLIST**

The City of North Las Vegas utilizes the Geotechnical Report Checklist to insure that all reports submitted to the City of North Las Vegas for review meet a minimum set of requirements, address project specific issues on a case basis, and reference page number(s) for items pertinent to the oversight of the proposed project.

The City of North Las Vegas intends to use the checklist for review and approval of all geotechnical reports submitted after March 1, 1996. The attached checklist **WILL BE REQUIRED** with all geotechnical reports submitted for review. As noted on page 5 of the attached checklist, Items I through IV are mandatory for all reports. Reports will be returned for correction if not completed.

**I. Project Information**

1. Project name	
2. Study date	
3. Consultant project identification number	
4. Company name and address, and name and phone number of who prepared the report	
5. Preparer's name, seal, and signature	
6. Client name	

**II Location and Development Description**

1. A written description of project location which includes adjacent street names	
2. Vicinity map	
3. Site plan	
4. Types of structures to be constructed	
5. Type of streets to be constructed	
6. Anticipated approximate cut and fill depths	
7. Anticipated building loads	

**III. Geotechnical Investigations**

1. Area or acreage	
2. A site reconnaissance survey of existing surface conditions	
3. Identification of any known or encountered geologic hazards, discuss local/regional geology.	
4. Type, description, and results of any surface geophysical surveys	
5. Describe any in-situ tests conducted	

6. Dates of investigations	
7. Type of equipment used for field explorations	
8. Number of borings and/or trenches	
9. Diagram showing location of borings and/or trenching	
10. Boring or trenching logs (continuous log): description of subsurface soils, classification of soils, identification of soil stratification zones, and approximate contact zones, including top and bottom elevations (if available), and borehold diameter.	
11. Location on the log of each Standard Penetration Test	
12. Identify any encountered groundwater	
13. Discuss any observed fissures, faults, or geologic hazards	
14. Identify seismic zone	

#### **IV Laboratory Testing**

1. Identify all tests performed, including procedures/standards used	
2. All test results in tabular or graphical form	

#### **V. Site Preparation and Grading**

1. Surface clearing and approximate depth of loose soil to be removed	
2. Required depth of ex/overexcavation in structural and pavement area	
3. Required depth of ex-overexcavation in nonstructural areas	
4. Required lateral extent of ex/overexcavation	
5. Scarification, moisture content, compaction requirements	
6. Structural/nonstructural fill composition: expansion, gypsum solubility, percent passing #200 sieve (min/max), maximum particle size	
7. Placement Requirements: Lift thickness, compaction (moisture and density for both granular and clayey material)	
8. Requirements for imported fill	
9. Caliche Considerations: Recommendations for removal of caliche, if encountered, as well as preparation and grading recommendations and recommendations for foundations and footings on caliche.	

10. Testing During Grading - type of testing required during site preparation and grading activities	
11. Fault/Fissure mitigation	

**VI. Foundations/Retaining Walls**

1. Conventional foundations	
a. Required minimum depth and width of footings	
2. Post-Tensioned Foundation	
a. Required minimum depth and width of footings	
b. Allowable bearing pressure	
c. Estimated friction coefficients	
d. Cement type	
e. Design center and edge of slab movement (Ym)	
f. Observation requirements	
3. Block Wall Foundations	
a. Required minimum depths and widths of footings	
b. Allowable bearing pressures	
c. Cement type	
d. Estimated friction coefficients	
e. Observation requirements	
4. Special foundations	
a. Required minimum depths and widths of footings	
b. Allowable bearing pressures	
c. Cement type	
d. Estimated friction coefficients	
e. Observation requirements	
5. Retaining Walls	
a. Required minimum depths and widths of footings	
b. Allowable bearing pressures	

c. Lateral earth pressures	
d. Estimated friction coefficients	
e. Backfill and drainage requirements	
f. Observation requirements	

**VII. Slab on Grade/Exterior Flatwork**

1. Base requirements	
2. Moisture barrier requirements (type, placement)	
3. Type of cement	

**VIII. Utility Trenches**

1. Main lines (in street areas) / laterals compaction requirements	
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**IX. Street and Pavement Designs**

1. R-values or CBR values. Traffic Indices	
2. Street section (AC thickness, Type I/Type II thickness), design method, and criteria	
3. Structural base coarse - compaction recommendations	
4. On-site pavement and street design	

**X. Drainage Moisture Protection**

1. Drainage recommendations for use in design	
2. Minimum slopes away from structures	
3. Landscaping recommendations	

\* The items identified in sections I. through IV. shall be provided in all geotechnical reports. Reports not containing this information will be returned for correction.

\*\* The items identified in sections V. through X. are to be provided as appropriate for the specific project.