



NRMCA/ASCC Parking Lot Pre-Construction Checklist



A. Safety

1. Personal protective equipment required. Site safety person: _____
 - First aid supplies
 - Providing and maintaining Material Safety Data Sheets (MSDS) at the jobsite
 - Safety Inspections
 - Safety meetings

B. Project Information

1. Project name: _____
2. Location: _____
3. Project start date: _____
4. Project completion date: _____

5. Project participants	Contacts
• Owner _____	_____
• Architect _____	_____
• Civil/Geotechnical engineer _____	_____
• Construction manager or General Contractor _____	_____
• Concrete contractor _____	_____
• Concrete producer _____	_____
• Admixture supplier _____	_____
• Concrete pumping contractor _____	_____
• Testing laboratory _____	_____
<input type="checkbox"/> ACI Concrete Laboratory Testing Technician Grade I or II	
<input type="checkbox"/> Equivalent _____	_____

C. Concrete Materials and Required Mixture Proportioning (Mix Design)

1. Concrete Mixtures (Mixes)

Mix Designations	Mix Codes	Location/Function	Approximate Volumes



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2. Mix Acceptance

i. Have mixes been approved Yes No

ii. Copies of the approved mixes to:

- Owners Representative Yes No
- Architect Yes No
- Engineers Yes No
- General Contractor Yes No
- Concrete Contractor Yes No
- Concrete Pumping Contractor Yes No
- Concrete Finisher Yes No
- Testing Laboratory Yes No
- Inspection Agency Yes No

3. Pumped Concrete Yes No

4. Target Strength (PSI) Yes No Strength required _____ psi at age _____

5. Water to Cement Ratio Yes No W/C Target _____

6. Concrete Batch Plant

a. Primary Plant: _____ Backup Plant: _____

b. NRMCA Plant Certification Required Yes No

c. Inspection Requirements

- Full Time
- Part Time
- Not Required

7. Other mix ingredients:

- Mid range water reducing admixture Yes No
- High range water reducing admixture Yes No
- Non-chloride accelerator Yes No
- Corrosion inhibitors Yes No
- Fly Ash ASTM Class C Yes No
- Fly Ash ASTM Class F Yes No
- GGBF Slag Yes No
- Silica fume Yes No
- Shrinkage reduction admixture Yes No
- Accelerator/Retarder Yes No
- Fibers Yes No
- Color Yes No
- Air Entrainment Yes No

Conventional _____% +/- _____%

Pumped _____% +/- _____%

Note: Batching all ingredient materials at the plant ensures best quality control of concrete. Jobsite modifications to mixture must be communicated to the concrete producer and recorded.



D. Construction Process

- 1. Responsible for construction/acceptance of base/subgrade, compaction, elevation including buried utilities: _____
- 2. Placing Concrete: Equipment, procedures and sub contactors. List all that apply:
 - a. Placement _____
 - b. Method _____
- 3. Placement and Finishing

Area	Finish Sequence

Variations reference: Refer to the ASCC Guide for Surface Finish of Formed Concrete

- 4. Joint Layout
 - a. Review/verification of control/contraction, isolation, and construction joint layout plans
 - NRMCA Jointing Plan Required _____
 - b. Type of joints contraction isolation construction
 - Formed joints _____
 - Tooled joints _____
 - Saw Cut _____
 - Depth of Cut (in relation to thickness) _____
 - Joint spacing _____
- 5. Reinforcement required Yes No
 - Position of reinforcement in slab _____
 - Method of supporting reinforcement at specified elevation _____
 - Termination at joints _____
 - Load transfer devices if required by design (e.g. dowel bars)
 - Type, size, and location _____
 - Check for specified alignment _____
- 6. Curing and Sealing
 - Methods _____
 - Curing periods _____
 - Temperature Control Yes No
 - Excessive evaporation control method _____
 - Other _____



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- Responsibility for removing curing compounds for striping/sealer _____
 - Sealers _____
 - Types _____
 - Locations _____
7. Materials permitted to adjust the slump
- Water _____
 - Mid-range water reducer _____
 - High-range water reducer _____
- a. Procedure to be followed and limitations that apply to jobsite slump adjustment (maximum amount, subsequent mixing, sampling of the load) _____
8. Project specification requirements for temperature
- a. Required temperature of concrete as delivered: Max _____ °F Min _____ °F
- b. Responsible person for requiring and approving special measures to meet concrete temperatures such as hot water, heated aggregate, cold water, ice, liquid nitrogen _____
9. Project specification requirements for concrete delivery time
- ASTM C 94
 - Other _____

E. Ordering and Scheduling Concrete

1. Person(s) responsible for ordering concrete (Concrete must be ordered by mixture (mix) code)

2. Minimum time notice required for go/no placements _____

3. Define large and specialty orders _____

4. Minimum notice required for large and specialty placements _____

5. Procedure for handling will call orders _____

6. Procedure for handling revised orders _____

7. Name(s) and phone number(s) of concrete producer, concrete contractor, and general contractor for last-minute cancellations

8. Person on jobsite responsible for reviewing delivery ticket prior to placement

9. Regular workday hours M_F are between _____ A.M. and _____ P.M. Other _____
 - a. Location of placement on site _____
 - b. Anticipated placement sizes _____ cubic yards
 - c. Minimum load size _____ cubic yards
 - d. What are anticipated placement rates _____ cubic yards/hour
 - e. Approximate placements dates _____



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- f. Inclement weather plant capability _____
- 10. Concrete delivery
 - a. Directions to site _____
 - b. Any traffic restrictions at or near the jobsite Yes No
 Comments _____
 - c. Any restrictions on entrance to or exits from jobsite Yes No
 Comments _____
 - d. Other Items _____
 Comments _____
- 11. Trucks:
 - a. Number of trucks _____
 - b. Type of trucks _____
 - c. Interval Schedule (Turn around time) _____

F. Environmental Aspects

- 1. Environmentally sensitive areas around the project Yes No
 Comments: _____
- 2. Responsibility for providing a concrete wash out area at the jobsite _____
- 3. Responsibility for clean up of the wash out areas _____
- 4. Are spill response kits available on site? Yes No
 Comments _____
- 5. On site emergency contact person _____
- 6. Responsibility for disposal of curing compounds _____
- 7. Other Items _____

G. Quality Control/Assurance

- 1. Accreditation requirements for laboratory _____
- 2. Certification requirements for testing personnel
 - Field personnel _____
 - Lab personnel _____
- 3. Advanced notice for scheduling testing personnel _____
- 4. Procedures for verification of specified requirements
 - Batch Records
 - Strength Tests
 - Other _____



H.1 Concrete Sampling and Testing Requirements

1. Sampling frequency _____
2. Sampling location
 - Point of discharge as per ASTM C94
 - Point of placement, if specified
 Comments (agreement on sampling location) _____

3. Tests performed on each sample (Check each test required)
 - Slump
 - Temperature
 - Density (unit weight)
 - Air content
 - Compressive strength
 - Flexural strength
 - Other _____
4. Cylinder size for compressive strength test
 - 4x8 inch 6x12 inch.
5. Beam size for flexural strength test
 - 6x6 inch Other _____
6. Number of cylinders per sample _____
 (hardened cylinder weight must be recorded on concrete strength reports)
7. Number of beams per sample _____
8. Number of cylinders to be cured _____ Field? _____ Lab? _____
9. At what ages are cylinders to be tested? _____
10. Are reserve cylinders required? Yes No How many? _____
11. Frequency of yield tests and compliance checks (three-load average of unit weight) _____
12. Distribution of reports _____

H.2 Test Cylinder Storage and Transportation:

1. Initial curing (up to _____ hours)
 - Immersed in water-controlled temperature
 - Storage box-controlled temperature
 - Exposed to environment spaces - record daily minimum and maximum temperature
2. Responsibility for providing cylinder storage box _____
Note: Refer to ACI 301
3. Responsibility for maintaining temperature in storage box after molding _____
4. Responsibility for final curing as per ASTM C 31 _____
Note: Cylinders made and field-cured can be used to determine the time the structure is put in service.



H.3 Acceptance/Rejection of Fresh Concrete:

1. Who has the authority to reject a concrete delivery? _____

Note: A second person may be designated as having the authority for FINAL rejection of a concrete delivery

2. What criteria will be used to reject concrete

- Slump _____
- Air content _____
- Unit weight _____
- Temperature _____
- Time limit _____
- Other _____

3. Are re-tests allowed before rejection? Yes No

Procedure _____

H.4 Acceptance Criteria for Hardened Concrete

1. Review Acceptance Criteria

- ACI 330
- Project Specifications
- Other _____

I. Cracks

1. Define unacceptable cracks (see surface defects in tolerances) _____

2. Method of repair of unacceptable cracks _____

3. Responsibility for repair of unacceptable cracks _____

4. Sealing (Filling) Joints Yes No

- Epoxy joint filler Yes No
- Elastomeric sealant Yes No
- Timing (review product directions and ACI Guidelines) _____
- Depth of filling _____
- Procedure-As per sealant manufacture instruction.

J. Responsibility for protection of concrete slab before transferring to owner: _____



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Notes: _____

Sketch: