Chabot College
Batting Cage DSA Submittal Analysis

March 2014
I. Basis for the DSA Batting Cage Analysis

The purpose of this report is to establish if the Division of the State Architect (DSA) has jurisdiction to require review and approval or if a chain link batting cage is exempt from DSA review?

This report will provide a final recommendation based on the information obtained through meetings with DSA Structural, Access and Fire Life Safety personnel.

II. General Study Goals:

- Review the department’s proposed batting cage layout with fencing installation contractor.
- Develop preliminary design documents indicating general construction components including size and depth of chain line poles footings, size and spacing of chain link poles, to be used as a basis for design review with the Structural Engineering Department, Access Department and Fire Life Safety Department.
- Research the DSA’s web site for information related to the construction of batting cages and any code requirement applicable to that facility.
- Secure a meeting with DSA to review the finding and obtain clarification if DSA submission is required.
- Following review with the above departments their finding will be noted and a final recommendation will indicate if the project is DSA exempt or not.

III. Batting Cage Construction:

- Cage Size: 45 feet by 60 feet equaling 2,700 sf.
- Cage Height: 12’-0.
- Footings: 10” dia, 36” deep with pole embedment of 2-6”- 2000 psi concrete 5 sack.
- Pole spacing: 10’ max.
- Corner Poles: 2 7/8” OD-5.79 lbs/ft.
CHA
Charles Ham Associates

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- Top Rail: 1 5/8” OD- 2.27lbs.lf.
- Middle Rail: 1.5.8” OD – 2.27 lbs/Lf.
- Fabric: 2.9.144
- Trusses: 18” deep welded steel at 4’-3” OC.
- Truss Intermediates: 1 7/8” OD – 2.7 LBS/LF.
- Roof Bracing: 1 7/8” OD – 2.7 LBS/LF.
- Gates: 48” wide gates – no closers- padlock/ADA latch
- Floor Finish: Synthetic (artificial turf) over compacted decomposed granite or 4” concrete slab on grade.
- Gate Path of Travel Transition: AC paving over compacted class II base with pressure treated edge boards.
- Gate Signage: ADA accessible signage

IV. Applicable Codes as Of January 1, 2014
1. 2013 California Building Standards
   Administrative Code (Part) 1, Title 24, CCR
   Administrative Code (Part) 1, Title 24, CCR
3. 2013 California Reference Standards Coe (Part 12, Title 24, CCR).
4. ADAGG (Americans With Disabilities Act Assessable Guidelines)
5. 2013 California Building Standards
   Administrative Code (Part) 1, Title 24, CCR
6. 2013 California Building Standards
   Administrative Code (Part) 1, Title 24, CCR
7. 2013 California Building Standards
   Administrative Code (Part) 1, Title 24, CCR
8. 2013 California Building Standards
   Administrative Code (Part) 1, Title 24, CCR

V. Project Code Review
Building Occupancy: B
Building Construction Type: VB Non Rated
Allowable Building Area: Occupancy allowable building area: 18,000 sf
Building Area 2,700 square feet
Allowable Stories: 2 Stories
Area Calculation: Per CBC Table 503
Type VB Non Rated
Allowable 9,000sf

Total Allowable Building: Area = 2,700 sf
2,700 sf f < 9000 sf OK
VI.  DSA Web Site Reference Documents

- DSA IR-A-22 Small Projects Exempt From DSA Review
- DSA IR-A-22 Appendix A – Review of Small Projects Exempt
  - Project Description # 9 Ancillary accessory facilities to athletic fields with light metal or wood frame construction (one story, not over 250 square feet, used for equipment storage, toilet, snack bars, and ticket booths, etc.
  - Project #18 Installation of synthetic (artificial turf) play fields or running tracks
- 2013 CBC Section 11B-206.4 and 11B-206.2.18
  - An accessible route must be provided to connect to the boundary of each area of sports activity.
    - Notes: As referenced in the 2010 ADA Advisory statement, this includes soccer fields, basketball courts, baseball fields, running tracks, tennis courts or other areas of school sports activity. Where multiple sports fields or courts are provided, an accessible route is required to each field or area of sport activity.
    - Entrances: Entrances shall be provided in accordance with Section 11B-2.06.4. Entrances door, doorways and gates shall comply with Section 11B-404 and shall be on an accessible route complying with Section 11B-402.

VII. DSA Policy Review of Project Exemption

*Structural Policy Response*

David Choi – Senior DSA Structural Engineer

- Project is not except from DSA Structural review because the batting cage is larger than IR A-22 Small Projects Description #9 exception threshold of 250 square feet.
- Based on the project not meeting the IR A-22 Small Projects Exception criteria means the project would be subject to the normal DSA project submittal requirements including Structural review.
- Project will need to be submitted like any other project. Submittal package must include a site plan with DSA Applications for each building, location of the project on the site, floor plan, and details.
- DSA Form 103 will need to be submitted to DSA
- David noted that DSA does not review batting cages on a regular basis. He recommends the Architect of Record submit whatever documents they feel will define your project. DSA will review what has been submitted and provide their review.
Access Policy Response
Dessa Rooney – Senior Architect

- Batting Cages are not except from DSA IR A-22 Small Projects Description #9 exception. Access review will be required for facilities less than or larger than 250 square feet.

- DSA requires access review of all synthetic (artificial turf) surfaces.
- Additional access improvements may be required per Section 1139B.2.1 if the project costs exceed $142,000.
- Batting Cages must comply with CBC 2013 Section 11B-206.12 and 11B-206.18 requiring an accessible route to each area of sport activity.
- Batting Cages must be accessible from the adjacent path of travel utilizing a direct surface. The transition from the path of travel to the finish floor shall not exceed ¼” height variance.
- Gates to the batting cage shall comply with ADA signage requirements.
- Gates to batting cages must comply with CBC Section 11B-404.2.9 and CBC Section 11B-404.2.10.

Fire Life Safety Response
Andy Chen – Fire Life Safety Officer I

- The proposed batting cage is larger than the 250 square foot exemption noted under IR-A-22 Project Description #9. As such the project will require DSA approval. Project requiring DSA approval is automatically reviewed by Fire Life Safety.
- The proposed structure is steel framing with no combustible finishes. Based on the type of construction there would not be any FLS requirements.
- Should the structure be covered with a flammable material, then additional protection of fire alarm devices and a pull station would be required.
- Non flammable roof materials may be installed without requiring additional protection using fire alarm devices or pull a station.

VIII. Project Finding
Batting cage is not exempt from DSA Access review regardless of their size per IR A-22- Appendix Project Description #9. Batting cages are exempt from DSA Structural review if they are 250 sf or less per IR A-22- Appendix A Project Description #9. This project is larger than the exemption threshold of 250 sf so the project must be submitted to DSA as a “Standard Application” bound by all the applicable codes and regulations under the jurisdiction of the Division of The State Architect.

Conclusion: DSA submission is required.
IX. Appendix

- Project Site Plan
- Batting Cage Floor Plan
- Batting Cage Reflected Ceiling Plan
- 10’-12’ Chain Link Fence Detail
- 10’-12’ Chain Link Gate Details
- Truss Detail
- Gate Padlock and Latch Detail
- DSA IR A-22 Small Projects Exempt From DSA Review Document
- 2013 CDC Section 11B-206.2.18 & 11B-206.4 Code Copies
- 2013 Significant Changes to the 2013 California Building Code Chapter 11B accessibility standards issued by DSA April 4/8/13 (2010 ADA Advisory 206.2.2)

End of DSA Submittal Analysis
APPENDIX
27/8" OD - 5.79 lbs/ft CORNER POSTS TYP.

23/8" OD - 3.65 lbs/ft CORNER POSTS TYP.

12'-0" HIGH CHAIN LINK FENCE TYP.

SYNTHETIC TURF

ADA CHAIN LINK GATE AND LATCH W/ADA SIGNAGE

AC PAVING PATH OF TRAVEL FROM (E) AC PATHWAY

(D) AC PAVING
TYP. CHAIN LINK FABRIC ROOF MATERIAL

TYP. WELDED PIPE TRUSS W/ 1½" 2.72 LBS/FT TOP AND BOTTOM CORDS.

TYP. 1½" 2.72 LBS/FT STEEL PIPE ROOF BRACING IN EACH DIRECTION

TYP. WELDED PIPE SLEEVE INTO TOP OF SET LINE POSTS.

BATTING CAGE

CHARLES HAM ASSOCIATES

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SCALE: $\frac{1}{8}" = 1'-0"

DATE: 3-16-13
10'-12' CHAIN LINK FENCING DETAIL

STYLE: TOP, MID, AND BOTTOM RAIL

PROJECT

OWNER / GEN. CON.

SUBMITTED BY

DRAWING NO. 2 DATE 11.27 CL-21
10'-12' CHAIN LINK GATE DETAILS

STYLE: TENNIS

NOTES:
GATE FACE TO MATCH FENCE.
GATE - TYPE 1

2-1/2" 1/4" DIA. STEEL LEVERS WELD LATCH EACH SIDE

SECTION - LEVERS ON CHAIN LINK GATE LATCH

WELDED

CHAIN LINK FENCE POST

CHAIN LINK GATE FRAME

TYPICAL LATCH 2-1/2"

1/2" DIA. LEVERS WELD TO LATCH

PADLOCK LOCKABLE DEVICE, 3/8" MIN. OPENING

NOTE:
CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR ACCEPTANCE BY DISTRICT REPRESENTATIVE PRIOR TO FABRICATION
SMALL PROJECTS EXEMPT
FROM DSA REVIEW

References:

Discipline: Structural

This Interpretation of Regulations (IR) is intended for use by the Division of the State Architect (DSA) staff, and as a resource for design professionals, to promote more uniform statewide criteria for plan review and construction inspection of projects within the jurisdiction of DSA which includes State of California public elementary and secondary schools (grades K-12, community colleges), and state-owned or state-leased essential services buildings. This IR indicates an acceptable method for achieving compliance with applicable codes and regulations, although other methods proposed by design professionals may be considered by DSA.

This IR is reviewed on a regular basis and is subject to revision at any time. Please check the DSA web site for currently effective IRs. Only IRs listed in the document at http://www.des.ca.gov/dsa/Resources/IRManual.asp at the time of plan submittal to DSA are considered applicable.

Purpose: The purpose of this Interpretation of Regulations (IR) is to clarify when plans and specifications for small construction projects on existing public school sites are required to be submitted to the Division of the State Architect (DSA) for review, approval and construction oversight.

1. Access Compliance Requirements: Some projects that are exempt from the Field Act (Education Code Sections 17280-17317, 17365-17374, and 81130-81149) are required to be submitted to DSA for review and approval by the Access Compliance Section of DSA. See Government Code Sections 4450-4461. Also see Appendix A of this IR for projects that fall into this category.

2. California Building Standards Code Compliance: Projects subject to the Field Act but not requiring DSA approval shall comply with all currently effective design, construction and inspection provisions of the California Code of Regulations, Title 24. When authorizing construction of projects described in this interpretation, the school district assumes responsibility to assure compliance with all code provisions. Architects and engineers providing project design must be licensed as required by the rules governing the licensing of architects and engineers. See Business and Profession Code Sections 6735 and 5535 through 5538.

All projects, whether governed by the Field Act or not, shall comply with all applicable accessibility provisions of the California Code of Regulations, Title 24.

3. Exempt Small Projects: See Appendix A for a list of small projects and the review requirements for Structural Safety (SS), Fire-Life Safety (FLS) and/or Access Compliance (AC). Items listed in the Appendix are exempt only when they constitute the entire scope of a project.

4. Exempt Reconstruction and Alterations: In addition to projects listed in Appendix A, projects involving alterations, repairs or additions to existing school buildings may be exempt from DSA review and approval based on the estimated construction costs. Refer to IR A-10: Reconstruction and Alteration Projects – Exemption from DSA Approval.

5. Voluntary Submittal: This interpretation does not preclude a school district from choosing to submit plans and specifications for exempt projects, with the appropriate fee, to DSA for review. Voluntary submittal of an exempt project will trigger full DSA plan review for code conformance and construction oversight including inspections and materials testing.
Appendix A – Review of Small Projects

Those items eligible for exemption listed below are exempt from DSA review and approval only when they constitute the entire scope of a project.

<table>
<thead>
<tr>
<th>Project Description</th>
<th>SS/FLS Review Required?</th>
<th>Access Compliance Review Required?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Poles less than 35 feet tall (lighting poles, flag poles, poles supporting open mesh fences, etc.)</td>
<td>✓</td>
<td>✓ ¹</td>
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<tr>
<td>2. Poles less than 25 feet above the roof line when attached to an existing school building (antennas, flag poles, etc.)</td>
<td>✓</td>
<td>✓ ¹</td>
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<tr>
<td>3. Cell or antenna towers.</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>4. Soil retaining walls less than 4 feet tall without surcharge or a sloping backfill</td>
<td>✓</td>
<td>✓ ¹</td>
</tr>
<tr>
<td>5. Baseball dugouts less than 250 sq. ft. of floor area with lightweight roof construction and walls less than 4 feet tall resisting (active, passive or at rest) soil pressure with no sloping backfills or surcharge.</td>
<td>✓ ✓ ²</td>
<td></td>
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<tr>
<td>6. Ball walls or yard walls less than 6 feet above grade</td>
<td>✓</td>
<td>✓ ¹</td>
</tr>
<tr>
<td>7. Free standing signs, scrolling message signs, scoreboards, or solid clad fences less than 8 feet above grade</td>
<td>✓ ✓ ³</td>
<td></td>
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<tr>
<td>8. Bleachers and grandstands five rows of seats or less</td>
<td>✓ ✓ ²</td>
<td></td>
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<tr>
<td>9. Ancillary accessory facilities to athletic fields with light metal or wood frame construction (one-story, not over 250 square feet, used for equipment storage, toilets, snack bars, ticket booths, etc.)</td>
<td>✓ ✓ ²</td>
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<tr>
<td>10. Playground equipment</td>
<td>✓ ✓ ³</td>
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<tr>
<td>11. Large playground equipment resembling buildings and over 250 square feet</td>
<td>✓ ✓ ³</td>
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<td>12. Open-mesh baseball backstops</td>
<td>✓ ✓ ³</td>
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<tr>
<td>13. Open-mesh fences, or ornamental or security fencing with spaced rails and pickets</td>
<td>✓ ✓ ⁴</td>
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<td>14. New or replacement of sidewalks</td>
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<tr>
<td>15. Landscaping</td>
<td>✓</td>
<td>✓ ¹</td>
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| 16. Replacement in kind of mechanical, electrical, or plumbing units when the cost does not exceed the thresholds in IR A-10 | ✓ | ✓ |

| 17. Cosmetic maintenance work such as painting, re-carpeting, wallpapering, reroofing, etc., as defined in Title 24, Part 1, Section 4-314. | ✓ | ✓ |

| 18. Installation of synthetic (artificial turf) play fields or running tracks | ✓ | ✓ |

| 19. Installation of new parking areas | ✓ | ✓ |

| 20. Installation of new surfacing over existing parking areas (such as asphalt overlays) | ✓ | ✓ ² |

| 21. Removal and replacement of existing parking area surfacing | ✓ | ✓ ³ |

| 22. Installation of seal-coating at existing parking areas (including new striping), or normal maintenance such as restriping or the filling of potholes and cracks | ✓ | ✓ |

Notes:  
1. No height limit for Access Compliance exemption.  
2. Required for all, no exception.  
3. Access Compliance will review the accessible path of travel to the playground/facility.  
4. Required if fence or gate crosses any accessible route of travel. Gates for pedestrian use on an accessible route of travel are required to comply with applicable accessibility requirements; installation of fencing and/or gates does not trigger other CBC 1134B.2 requirements.  
5. If accessible parking spaces are impacted.
2. An accessible route shall not be required to free-standing press boxes that are elevated above grade 12 feet (3660 mm) minimum provided that the aggregate area of all press boxes is 500 square feet (46 m²) maximum.

**11B-206.2.8 Employee work areas.** Common use circulation paths within employee work areas shall comply with Section 11B-402.

**Exceptions:**
1. **Reserved.**

2. Common use circulation paths located within employee work areas that are an integral component of work area equipment shall not be required to comply with Section 11B-402.

3. Common use circulation paths located within exterior employee work areas that are fully exposed to the weather shall not be required to comply with Section 11B-402.

**11B-206.2.9 Amusement rides.** Amusement rides required to comply with Section 11B-234 shall provide accessible routes in accordance with Section 11B-206.2.9. Accessible routes serving amusement rides shall comply with Division 4 except as modified by Section 11B-1002.2.

**11B-206.2.9.1 Load and unload areas.** Load and unload areas shall be on an accessible route. Where load and unload areas have more than one loading or unloading position, at least one loading and unloading position shall be on an accessible route.

**11B-206.2.9.2 Wheelchair spaces, ride seats designed for transfer, and transfer devices.** When amusement rides are in the load and unload position, wheelchair spaces complying with Section 11B-1002.4, amusement ride seats designed for transfer complying with Section 11B-1002.5, and transfer devices complying with Section 11B-1002.6 shall be on an accessible route.

**11B-206.2.10 Recreational boating facilities.** Boat slips required to comply with Section 11B-235.2 and boarding piers at boat launch ramps required to comply with Section 11B-235.3 shall be on an accessible route. Accessible routes serving recreational boating facilities shall comply with Division 4, except as modified by Section 11B-1003.2.

**11B-206.2.11 Bowling lanes.** Where bowling lanes are provided, at least 5 percent, but no fewer than one of each type of bowling lane, shall be on an accessible route.

**11B-206.2.12 Court sports.** In court sports, at least one accessible route shall directly connect both sides of the court.

**11B-206.2.13 Exercise machines and equipment.** Exercise machines and equipment required to comply with Section 11B-236 shall be on an accessible route.

**11B-206.2.14 Fishing piers and platforms.** Fishing piers and platforms shall be on an accessible route. Accessible routes serving fishing piers and platforms shall comply with Division 4 except as modified by Section 11B-1005.1.

**11B-206.2.15 Golf facilities.** At least one accessible route shall connect accessible elements and spaces within the boundary of the golf course. In addition, accessible routes serving golf car rental areas; bag drop areas; course weather shelters complying with Section 11B-238.2.3; course toilet rooms; and practice putting greens, practice teeing grounds, and teeing stations at driving ranges complying with Section 11B-238.3 shall comply with Division 4 except as modified by Section 11B-1006.2.

**Exception:** Golf car passages complying with Section 11B-1006.3 shall be permitted to be used for all or part of accessible routes required by Section 11B-206.2.15.

**11B-206.2.16 Miniature golf facilities.** Holes required to comply with Section 11B-239.2, including the start of play, shall be on an accessible route. Accessible routes serving miniature golf facilities shall comply with Division 4 except as modified by Section 11B-1007.2.

**11B-206.2.17 Play areas.** Play areas shall provide accessible routes in accordance with Section 11B-206.2.17. Accessible routes serving play areas shall comply with Division 4 except as modified by Section 11B-1008.2.

**11B-206.2.17.1 Ground level and elevated play components.** At least one accessible route shall be provided within the play area. The accessible route shall connect ground level play components required to comply with Section 11B-240.2.1 and elevated play components required to comply with Section 11B-240.2.2, including entry and exit points of the play components.

**11B-206.2.17.2 Soft contained play structures.** Where three or fewer entry points are provided for soft contained play structures, at least one entry point shall be on an accessible route. Where four or more entry points are provided for soft-contained play structures, at least two entry points shall be on an accessible route.

**11B-206.2.18 Area of sport activity.** An accessible route shall be provided to the boundary of each area of sport activity.

**11B-206.3 Location.** Accessible routes shall coincide with or be located in the same area as general circulation paths. Where circulation paths are interior, required accessible routes shall also be interior. An accessible route shall not pass through kitchens, storage rooms, restrooms, closets or other spaces used for similar purposes, except as permitted by Chapter 10.

**11B-206.4 Entrances.** Entrances shall be provided in accordance with Section 11B-206.4. Entrance doors, doorways, and gates shall comply with Section 11B-404 and shall be on an accessible route complying with Section 11B-402.

**Exceptions:**
1. **Reserved.**

2. **Reserved.**
**Accessible Route: Areas of Sport Activity**

**Description:** An accessible route must be provided to connect to the boundary of each area of sports activity.

**Change from previous standard:** The previous general requirement for accessibility is now a specific code citation to require accessible routes to sports areas.

**Effective date:** March 15, 2012

**Original source:** 2010 ADA Advisory 206.2.2

**Relevant 2013 CBC code citations:** Section 11B-206.2.18 and 11B-206.2.12

**Notes:** As referenced in the 2010 ADA Advisory statement, this includes soccer fields, basketball courts, baseball fields, running tracks, tennis courts or other areas of school sports activity. Where multiple sports fields or courts are provided, an accessible route is required to each field or area of sport activity.

**Accessible Route: Press Boxes Exceptions**

**Description:** Stadium press boxes will not be required to be on an accessible route under certain circumstances based on the aggregate size of one or more press boxes and the elevation above grade for free-standing press boxes.

**Change from previous standard:** No exceptions allowed for providing accessibility to stadium press boxes.

**Effective date:** January 1, 2014

**Original source:** 2010 ADA 206.2.7 Exceptions #1 and #2

**Relevant 2013 CBC code citations:** Section 11B-206.2.7 Exceptions #1 and #2

**Notes:** Important to note that if there are multiple press boxes at a stadium then the 500 square foot total area exception applies to the area of both press boxes combined not individually.