SCHOOL DISTRICT PALM BEACH COUNTY
BUILDING DEPARTMENT
PLAN REVIEW CHECK LIST -- CIVIL

3300 SUMMIT BOULEVARD
WEST PALM BEACH, FLORIDA 33406
TEL (561) 688-7687 FAX (561) 688-7654
http://www.palmbeach.k12.fl.us/FM/BD/index.htm

PROJECT NAME: _____ DATE _____
PROJECT NUMBER: _____ REVIEWER _____

The intent of this checklist is to act as a tool for the District Plan Reviewers to review construction plans and specification of projects submitted for permitting by the Building Department. Architects and Engineers are encouraged to use this document as a tool to prepare construction plans and specifications for District projects.

The codes references in the checklist are the Florida Building Code (FBC), District Design Criteria (DDC), National Fire Prevention Association Codes (NFPA), Florida Statutes (FS), and Florida Administrative Code (FAC).

Phase I – Schematic Design

OK, Comment, or N/A	Item	Code Reference
	Acreage Listed	District Requirement
	Compass Points and Graphic Symbol	District Requirement
	Scale Noted on Drawings	District Requirement
	Contours and Topographic Information Shown	District Requirement
	Flood Elevation Noted	District Requirement
	Wind Velocity Zone Noted	District Requirement
	Overall Dimensions Provided	District Requirement
	Adjacent Roadways Labeled and Shown	District Requirement
	Emergency Access Shown	District Requirement
	Service Areas Shown (Dumpster / Lift Station)	District Requirement
	Vehicle and Bicycle Parking, Roads and Driveways Shown	District Requirement
	Play Areas Shown (Kindergarten)	District Requirement
	Bus Loading Area Shown	District Requirement
	Parent Drop Off Area Shown	District Requirement
	Existing Buildings and Uses Shown	District Requirement
	Location of Proposed Buildings Shown	District Requirement
	Community Use Buildings Shown and Identified (Hurricane Shelter, Clinic)	District Requirement
	Preliminary Soil Boring Location Map Provided	District Requirement
	Flood Plain Statement Provided	District Requirement
	Environmental Studies or Statement Provided	District Requirement

Phase II –Design Development

OK, Comment, or N/A	Item	Code Reference
	All Phase I Items Addressed	District Requirement
	Landscaping Shown	District Requirement
	Drainage System Shown	District Requirement
	Water Retention Features Shown	District Requirement

	Storm Water Outfall Identified	District Requirement
	Sewage Disposal System Shown	District Requirement
	Potable Water System Shown	District Requirement
	Safety, Health, Welfare, Visual and Comfort Features Identified	District Requirement
	Existing and Required Tree Statement Provided	District Requirement
	Geotechnical Report Provided	District Requirement
	Outline Specifications Provided	District Requirement
	Dimensioning Complete	District Requirement
	Horizontal Control Points Shown.	District Requirement

CIVIL – "Phase III" Plans (Final Construction Documents)

General

OK, Comment, or N/A	Item	Code Reference
	Plans are signed and sealed.	§104.2.1 FBC
	All documentation submitted.	District Requirement
	Index of sheets represents what is submitted.	District Requirement
	Plans match the specifications.	District Requirement
	Plans comply with the District Design Criteria.	District Requirement
	There has been coordination with SDPBC Environmental Control Office (for well field / petroleum product projects).	District Requirement
	North arrows on all site plans, north up or right on all sheets.	District Requirement

Permitting / Concurrency

OK, Comment, or N/A	Item	Code Reference
	Copy of site plan approval from Palm Beach County or local municipality or statement from SDPBC Planning.	§423.4.1 FBC
	Copy of South Florida Water Management District permit.	D.1.a.(1) DDC
	Copy of Palm Beach County Department of Environmental Resources Management Permit for construction in Zone 1 Well Field Protection Areas.	D.4.a. DDC
	Cope of site plan and fire main system approval from the local fire department (authority having jurisdiction).	3-1.1 NFPA 1141 98
	Solid waste provider approval for location and size of dumpster pad.	C.1.d.(4)(a) DDC

Site Plan / Buildings

OK, Comment, or N/A	Item	Code Reference
	Existing facilities are shown and identified.	§423.4.1 FBC
	Proposed demolition, modifications to existing buildings, and new construction are shown and identified.	§423.4.1 FBC
	Parcel boundary (distance and bearing) information is on plans.	§423.4.1 FBC
	Adjacent streets and their right-of-ways are shown, labeled, and dimensioned.	§423.4.1 FBC
	Adjacent property limits and land use are identified.	§423.4.1 FBC

	Bench mark(s) and horizontal control point(s) are provided.	A.2. DDC
	Existing and proposed elevations are shown for all features.	§423.4.1 FBC
	Minimum building setback is met.	§423.10.4 FBC
	Existing and proposed easements are identified as to use, grantee, and location.	§423.4.1 FBC
	Students can access all educational buildings and athletic facilities without crossing internal or public roadways or parking areas.	§423.10.2.5 FBC
	Overhead pedestrian bridges connect educational plants separated by highways.	§423.10.2.2 FBC

Chain Link Fence

OK, Comment, or N/A	Item	Code Reference
	Fencing is shown in all required areas.	§423.10.1.1 FBC
	Barbed wire, razor wire, and electrically charged fences not used.	§423.10.1 FBC
	Double gates used at all driveways, emergency vehicle access points and in fences around retention ponds. No rolling gates are allowed.	I.4. & I.11 DDC
	Fence gates shall swing inward or not interfere with public right-of-way.	4-4.7 NFPA 1141 98
	Fence and gate material and height meets District Requirements. Hinge and post materials and dimensions meet District Requirements. Fence details are provided.	I.1 DDC
	Perimeter fences are 12 inches inside of the property line.	District Requirement
	Athletic area fencing complies with requirements in "Facilities Planning for Physical Activity and Sport – Court and Field Diagram Guide".	B.1.f. DDC (Architectural)
	Kindergarten classroom has direct access to a fenced play area and no ITV poles, manholes, catch basins, etc. are in the kindergarten play areas.	§423.10.5.1 FBC

Sidewalks and Curbs

OK, Comment, or N/A	Item	Code Reference
	Raised sidewalks and curbs separate pedestrian and vehicular traffic.	District Requirement
	All buildings are connected by paved walks and accessible under continuous roof cover.	§423.10.2.1 FBC
	Roofs for covered walks extend one foot beyond each side of the walk.	§423.10.2.1 FBC
	Sidewalks and curbs extend at least two feet past the end of a covered walk.	F.1.d. DDC
	All passenger-loading zones have disabled access aisles.	§11-4.7 FBC
	Disabled parking stalls and crosswalks have accessible ramps.	§423.10.2.2 FBC
	Accessible ramps and features meet Code dimensional requirements.	§11-4.6 FBC
	Sidewalk and curb construction details meet District requirements.	F.1. DDC
	Sidewalk and curb construction details in the plan set.	§423.4.1 FBC
	Detectable warning surfaces on all curb ramps.	§11-4.29.2 FBC
	Asphalt curbs are not used. Concrete curbs are constructed on stabilized subgrade.	F.1.e. DDC

Pavement

OK, Comment, or N/A	Item	Code Reference
	Primary and secondary site access is provided.	§423.10.2.5 FBC
	Bus driveways and parent pickup driveways / areas are separated.	§423.10.2.5 FBC
	Disabled parking is provided in all parking areas per Code.	§423.10.2.7 FBC
	Minimum parking lot aisle width and parking stall depth meet fire codes.	4-3.1 NFPA 1141 98
	A minimum vertical clearance of 13 feet 6 inches over the full width is maintained for all means of vehicular access.	4-2.8 NFPA 1141 98
	The minimum bus lane width is 24 feet.	§423.10.2.6 FBC
	Bus lane turning radius is at least 60 feet as measured at the centerline for two-way traffic and at the outside curb for one-way traffic.	§423.10.2.6 FBC
	Parent drop off area outside turning radius is 50 feet for fire truck access.	C.1.d.(3) DDC
	Offsite improvements are shown and comply with requirements.	C.1.g. DDC
	Road design, pavement markings, and signage comply with Florida Department of Transportation Requirements.	§423.10.2 FBC
	All disabled parking stalls are adjacent to an access isle.	§11-4.6 FBC
	Number of disabled parking stalls meets code for each parking area.	§11-4.1.2(5) FBC
	Total number of parking stalls meets code.	§423.10.2.8 FBC
	Proposed and required parking spaces are tabulated on Civil or Arch. plans.	§423.10.2.8 FBC
	A concrete dumpster pad with a 10 foot wide concrete approach apron is provided or the local criteria is explained.	F.3.b. DDC
	Thickness, type, placement, density, and bearing ratio are specified as appropriate for asphalt concrete, limerock base, shell rock base, and stabilized subgrade.	E.1. DDC
	Prime and tack coats are provided at the proper location.	E.1. DDC
	Roadways drain to the outside edge of the pavement or to an inverted crown if justified by the designer.	§423.10.2 FBC
	Parking areas drain toward median areas or vehicle travel lanes and away from pedestrian travel paths.	§423.10.2 FBC
	20 foot-wide unpaved fire lanes are shown as needed.	C.2.a. DDC
	Fire lane shall be no closer than 10 feet and no further than 30 feet from the buildings being accessed.	4A-60.003(2)(d) FAC'02
	Fire lanes are signed at both ends "Fire Dept. Access Road" with markers on both sides of the road at 75-foot intervals and curb cuts at entrance and exit.	C.2.a.(1) DDC
	Fire lane has limerock base and stabilized subgrade per standards or other construction that will support a 32-ton fire truck.	C.2.a.(2) DDC

Signs and Pavement Markings

OK, Comment, or N/A	Item	Code Reference
	All signs and pavement markings comply with Florida Department of Transportation Standards.	§423.10.2 FBC
	Required traffic signs are provided.	J.2. DDC
	Required identification and educational signs are provided.	J.1.a. DDC
	Required pavement markings are provided.	E.3.a. DDC

Drainage / Storm Water Management

OK, Comment, or N/A	Item	Code Reference
	All storm water runoff that occurs onsite is directed to the storm water management system via perimeter berms or other management features.	D.3.f. DDC
	The storm water management system design meets South Florida Water Management District criteria unless more stringent SDPBC criteria apply.	D.1.a. DDC
	The minimum pipe cover is 36 inches.	District Requirement
	Finished floor elevations for new structures are higher or equal to existing floor elevations.	D.2.a.(4) DDC
	All retention basins are interconnected.	D.3.c. DDC
	Parking lots, internal roadways, and sport fields meet the minimum design elevation criteria.	D.2.b. DDC
	Building floors and sport fields are also set at least 12 inches above all adjacent roadways with the more stringent criteria governing.	D.2.a.(3) DDC
	Storm sewers are constructed using approved pipe materials.	D.3.e. DDC
	The storm sewer uses sweep fittings.	D.3.h. DDC
	Installation details are provided for system components such as inlets, etc.	D.3.d. DDC
	Storm sewer manhole covers are labeled “STORM”.	D.3.d.(2) DDC
	Catch basins are supplied with drain hole and bottom sump.	D.3.d.(4) DDC
	Exfiltration trenches and inlet sump drains are not installed in municipal or county well fields or in well field protection zones one and two.	D.4.b. DDC
	The site storm water management system has a positive outfall to a regional system shown on the plans.	D.3.b. DDC
	All roof drains are connected to the storm sewer system with 8” minimum diameter roof leaders. Architectural and civil plans agree regarding roof drain locations.	D.3.h. DDC
	HVAC system condensate drains are routed to the storm sewer system with backflow valves or air gaps on the drains. Mechanical and civil plans agree regarding condensate drain locations.	D.3.i. DDC

Potable Water Distribution System

OK, Comment, or N/A	Item	Code Reference
	Separate fire suppression and potable water piping systems shown.	H.2.b. DDC
	Construction materials meet District Requirements.	H.1.e. DDC
	The minimum pipe cover is 36 inches.	H.1.d. DDC
	Backflow prevention assembly on main campus water service meets District Requirements.	H.2.f. DDC
	Potable water meter installation meets District Requirements.	H.2.d. DDC
	Proper thrust restraint is specified for all pipe joints.	H.1.d. DDC
	Each building water service line is equipped with a shut off valve.	H.2.c.(2) DDC
	Backflow preventors and siphon breakers are installed at required locations within the campus.	H.1.b. DDC
	Drinking water fountains and hose bibs are provided at the athletic facilities.	H.2.g. DDC
	Installation details are provided for system components, such as valves, etc.	H.1.d. DDC
	Civil and plumbing drawings agree regarding water service locations.	H.1.h. DDC
	Proper vertical and horizontal separation is maintained between potable water piping and sanitary / storm piping.	H.1.b. DDC

	Existing water mains that will remain in service are identified.	H.1.i. DDC
	Potable water is used for irrigation only on barrier islands, in Zone 1 well field protection areas, and in limited xeriscape areas near buildings.	K.5.d. DDC
	A separate water service is provided for each building.	H.2.c.(1) DDC

Fire Suppression Water System

OK, Comment, or N/A	Item	Code Reference
	Construction materials meet District Requirements.	4.1 NFPA 24 02
	The minimum pipe cover is 36 inches.	H.1.d. DDC
	A backflow prevention assembly is provided for all connections to potable water systems per District Requirements.	5.4 NFPA 24 02
	A fire department connection, post indicator valve, and check valve are provided for each feed line to individual building sprinkler systems.	6.3 NFPA 24 02
	Fire department connections are located per code requirements.	6-1.3 NFPA 1141 98 5.9 NFPA 24 02
	Flow and pressure test reports are provided to support design of the fire system.	5.1.2 NFPA 24 02
	Dead end hydrants are connected to 8 inch or larger mains.	7-3.2 NFPA 1141 98
	Each fire department connection is labeled with the building it serves.	5.9 NFPA 24 02
	Fire hydrants are provided per code requirements.	7-2.3 NFPA 1141 98
	Installation details are provided for system components, such as valves, etc.	H.1.d. DDC
	Civil and fire protection drawings agree regarding fire service locations.	H.1.h. DDC

Wastewater Collection System (Sewer)

OK, Comment, or N/A	Item	Code Reference
	Civil and plumbing drawings agree regarding sanitary service locations.	Page 9 DDC
	Sanitary service lines and cleanouts meet plumbing code requirements.	§P700 FBC
	Sanitary service cleanouts are placed per District requirements.	H.4.g. DDC
	Construction materials meet District Requirements.	H.1.e. DDC
	The minimum pipe cover shall be 36 inches.	H.1.d. DDC
	Installation details are provided for system components, such as manholes, etc.	H.1.d. DDC
	Manholes and main line gravity sewers are installed per District requirements.	H.4.c. DDC
	Gravity sewers and services constructed in well field protection zone one and two meet special material requirements.	H.4.i. DDC
	Wastewater from high school laboratories passes through a neutralization tank prior to the sanitary sewer.	§P803.2 FBC
	Grease trap installations meet District requirements (number of tanks and structural design).	H.4.e. DDC
	Oil / water separators are installed on vehicle service area drains in accordance with District requirements and are approved by the Environmental Control Office.	H.4.f. DDC
	The wastewater system is designed to accommodate future installation of relocatable buildings when their use has been identified on the site plan.	§423.10.9 FBC

	A drain connected to the sanitary sewer is installed at the dumpster pad when a trash compactor is provided.	F.3.e. DDC

Wastewater Lift Stations and Force Mains

OK, Comment, or N/A	Item	Code Reference
	Lift station and force main meet local utility design criteria where local utility assumes ownership and maintenance.	H.4.h.(2) DDC
	Lift station is located as near as possible to a public street right-of-way where local utility shall assume ownership and maintenance.	H.4.h.(1) DDC
	Top of lift station and associated structures is above 100 year flood elev.	H.1.b. DDC
THE FOLLOWING ITEMS APPLY TO STATIONS OWNED BY THE DISTRICT		
	Lift station electrical service is tied into the school emergency power system.	H.4.h.(3)(c) DDC
	A sign that reads, "FOR EMERGENCY - CALL 561-434-8700" is required.	District Requirement
	Telemetry is **not** provided.	H.4.h.(3)(a) DDC
	Lift station has hose bib and backflow preventor on water service line to bib.	H.4.h.(3)(d) DDC
	Construction materials meet District Requirements.	H.1.c. DDC
	Installation details are provided for system components, such as by-pass pumping connections, etc.	H.1.d. DDC
	Use of duplex Barnes pumps is required.	District Requirement

Propane and Natural Gas

OK, Comment, or N/A	Item	Code Reference
	All propane tanks are installed underground and anchored to prevent floatation.	L.1.b. DDC
	There is a backup propane tank for emergency generator sets that are fired with natural gas.	L.1.a. DDC
	Propane tank locations are shown on the plans. Propane tank installation details are provided.	District Requirement
	The propane tank for the emergency generator is separate from other propane tanks. There is no solenoid valve in this propane tank feed line.	District Requirement
	A solenoid valve is provided for the propane tank feed line that supplies kitchen equipment and science labs. The ansul system controls the kitchen valve and the fire alarm shall control the science lab valve.	District Requirement
	Show routing for gas pipe on the plans. Confirm location and size of gas pipe. Provide installation details for gas pipe and all gas piping appurtenances.	District Requirement

Irrigation Well

OK, Comment, or N/A	Item	Code Reference
	Irrigation well is shown on site plan.	Chapter 373 FAC

	Well is fenced.	§423.10.1.1 FBC
	Well pad elevation is above 100-year, 3-day flood elevation.	62-532 FAC
	Well casing diameter and type is specified.	62-532 FAC
	Well screen diameter and type is specified.	62-532 FAC
	Well casing is grouted to 40 feet below land surface (minimum).	62-532 FAC
	Gravel packed wells have specifications for packing material and outer casing material, in addition to normal well requirements.	62-532 FAC
	All above ground pipe and fittings are specified as being made of metal components.	62-532 FAC
	The irrigation well pump is specified.	62-532 FAC
	Electric power and control wiring runs are shown on a site plan.	80.13(12) NFPA 70 (NEC) 02
	A well detail is provided that shows requirements for: • Wellhead piping, including meter, check valve, isolation valve, casing vent, air release valve. • Well casing, well pump discharge pipe, well pump placement. • Well casing elevations, well screen elevations.	62-532 FAC
	Treatment equipment for iron removal is shown and specified or note on drawings indicates that iron removal is not required.	District Requirement
	Local electrical disconnect at well head is provided for well pump power wiring.	430.102(B) NFPA 70 (NEC) 02
	South Florida Water Management District permit applications for Well Construction and Consumptive Use have been filed or permits for both have been obtained.	Chapter 373 FAC

Athletic Fields and Facilities

OK, Comment, or N/A	Item	Code Reference
	Utility structures (e.g. – inlets, etc.) and other obstructions in and near play fields don't cause tripping hazards. Recommended minimum separation between edge of sports field playing area and utility structure is 10 feet.	D.3.d.(3) DDC
	Utility structures are not shown in fenced play areas.	§423.10.1.1 FBC
	Elementary and middle school facilities comply with "Facilities Planning for Physical Activity and Sport".	B.2. DDC (Architectural)
	Elementary school sports fields are designed to accommodate boys 10 years old and younger.	B.2. DDC (Architectural)
	Middle school sports fields are designed to accommodate boys 14 years old and younger.	B.3. DDC (Architectural)
	High school athletic facilities conform to requirements in the National Federation of State High School Associations "Court and Field Diagram Guide".	B.4. DDC (Architectural)
	Sports field lighting is shown for all high school athletic fields with the exception of the baseball fields.	B.4.c.(5) DDC (Architectural)
	Detailed grading design is provided for baseball and softball fields per noted accepted design standards. Required minimum elevations are provided per the storm water management section.	B.4.d. DDC (Architectural)
	Disabled access is shown for fields, bleachers, dugouts, courts, etc.	B.1.a. DDC (Architectural)
	Eight lane tracks shown at high schools with curbs and rubber surface course.	B.4.b. DDC (Architectural)

	Six lane tracks shown at middle schools with curbs, but no rubber surface course.	B.3.b. DDC (Architectural)
	A minimum clear area of 15 feet shown in front of bleachers.	District Requirement
	Scoreboards required. If scoreboards are donated, foundations and supports are shown on plans. Foundation design calculations are provided.	B.4.b.(a) DDC (Architectural)

Miscellaneous

OK, Comment, or N/A	Item	Code Reference
	Maximum unconsolidated backfill depth is 12 inches per lift.	B.2. DDC
	Backfill compaction is 98% of AASHTO T-180 (modified proctor) (min.).	B.2. DDC
	Soil density testing required at one test per 5,000 square feet, minimum.	B.2.a. DDC
	ITV pole and foundation location and details shown on plans. Foundation design calculations provided.	District Requirement
	Flag pole and foundation location and details shown on plans. Foundation design calculations provided.	District Requirement

Specifications

OK, Comment, or N/A	Item	Code Reference
	Specifications match the District Master Specs	District Requirement
	Specifications match the plans	District Requirement
	Specifications follow the District Design Criteria	District Requirement
	Specification follow the Educational Specifications	District Requirement
	Geotechnical engineer's report is provided in the specifications.	B.1. DDC