CHECKLIST #9 – MASTER PLAN LAND DEVELOPMENTS AND SUBDIVISIONS CONSERVATION DEVELOPMENTS ONLY

Note: This Checklist is to be used only for Conservation Developments consisting of 6 lots / units or more.

The applicant shall submit to the Administrative Officer at least five (5) blue line or photocopies of all master plan maps and information required below. The scale of all plans shall be sufficient to clearly show all of the information required and shall be subject to the approval of the Administrative Officer. Plans shall include a certification that all plans and improvements conform to a minimum Class IV standard of the State of Rhode Island and Providence Plantations, Board of Registration for Professional Engineers and Board of Registration of Land Surveyors.

Narrative Report - The following information shall be presented in the form of a written narrative report, supplemented as necessary with drawings, sketches or plans to convey intent. The narrative report shall include reduced sets of all drawings and plans required below on sheets no larger than 11" x 17". Initially, the applicant shall submit to the Administrative Officer at least five (5) plans of master plan maps required below. The number of reduced copies of the plans and narrative report shall be determined by the Administrative Officer, based upon the required distribution to the TRC and Planning Commission, and other officials and agencies listed in Supporting Materials, below.

At a minimum, required information includes the following:

- 1. Site Base Map (see below)
- 2. Existing Resources and Site Analysis Map. See § IV.A.14
- 3. Site Context Map. See § IV.A.9
- 4. Sketch Plan Overlay Sheet. See § IV.A.8
- 5. Conventional Yield Plan. See § IV.A.10
- 6. Filing Fee: \$300 + \$50 per acre

A. BASE MAP

	Master Plan Drawing(s) required by this Checklist shall show the following information (if blicable):
1.	Title of subdivision.
2.	Name and address of property owner and applicant.
3.	Name, address and telephone number of engineer or land surveyor, or other preparer of plan(s).
4.	Date of plan preparation, with revision date(s) (if any).
5.	Graphic scale and true north arrow.
6.	Inset locus map at 1" = 2000'
7.	Names of abutting property owners and property owners immediately across any adjacent streets
8.	Plat and lot number(s) of the land being subdivided, abutting properties and properties immediately across any adjacent street.
9.	Zoning district(s) of the land being subdivided. (If more than one district, zoning boundary lines must be shown.)
10.	Perimeter boundary lines of the subdivision, drawn so as to distinguish them from other property lines.
11.	Area of the subdivision parcel(s) and proposed number of buildable lots.
12.	Location and dimensions of existing property lines within or forming the perimeter of the subdivision parcel(s).
13.	Easements and rights-of-way within or adjacent to the subdivision parcel(s).
14.	Location, width and names of existing roads within and immediately adjacent to the subdivision parcel.
15.	Names of abutting property owners and property owners immediately across any adjacent streets
16.	Sheet size 18" x 24"

B. THE 10-STEP DESIGN REVIEW PROCESS - Refer to § IV.A.7

Step 1: Analyze the Site

The information required in § IV.A.14 shall be shown on the Existing Resources and Site Analysis Map(s), and shall be subject to the approval of the Administrative Officer. This information may be based on the information provided at the pre-application stage of review (Checklist #8), with updates as required.

a. Topography and Slopes

After the pre-application meeting and concept review, the Planning Commission and the applicant should agree on the necessary accuracy and detail of topographic data for the Master Plan submission. 10' contours (elevation lines) based on USGS surveys can be traced manually or digitized for use as an overlay, and may be sufficient if proposed development zones fall in areas of moderate slopes. For planning roads and building sites within areas over 8% grade, or to discern gently-sloping areas near wetlands, vernal pools or intermittent streams, a field survey of topography to map the 2' or 5' contour interval may be necessary to ensure a buildable Master Plan. This can be the basis for a more accurate slope map depicting a general assessment of development suitability, or potential hazards, based on slope or hydrologic conditions.

- 1. ____ Existing topography with minimum 10' contour lines or more detailed, if necessary.
- 2.____ Slope map, with slopes grouped according to three categories based on development suitability: <15%, 15-25%, and over 25%. Steeper slopes should be shown in progressively darker colors or shades of gray.

b. Natural Resource Inventory

Based on the preliminary designation of development zones, further site investigation and surveys may be necessary to establish the limits of natural resource areas such as wetlands, streams, vernal pools, and noteworthy vegetation. These overlays can be updated with the more accurate information, using the same graphic schemes as the Pre-Application submission. Subsurface aquifers and surface water supplies should be indicated in a gradation of colors, tone or hatching where the reservoir or aquifer is darkest and its watershed or recharge areas are progressively lighter. Farmland and forested land should be shown, with an indication of underlying soil types with hatching and/or labels. Natural Heritage areas can be shown with an outline around the designated area.

in	Location of land unsuitable for development as defined in the Zoning Ordinance, cluding wetlands, ponds, streams, ditches, drains, special aquatic sites, vernal pools. Il wetland locations shall be verified by RIDEM.
	Vegetative cover on the property, indicating any unfragmented forest tracts.
5	Soils types, indicating any prime farmland soils, and any land in active ricultural use. See Supporting Materials, No. 4
6	_ Geologic formations
7	_ Ridge lines of existing hills
8	_ Wellhead protection areas for public or community drinking water wells
9	_ Flood hazard areas (Town)
10	State, regional, or community greenways and greenspace priorities.
11	State-designated Natural Heritage Sites (RIDEM)
carefi durin _t featur	ic houses and outbuildings, and other landscape features may need to be more ally surveyed in the field, along with other special features, views, etc. identified at the site visit and pre-application review. This is especially important if these ses fall within proposed development areas, and could be incorporated into the sed development.
	Approximate location of man-made features such as roads, structures, atbuildings, roads or trails, and other such features on the parcel.
13	Historically significant sites or structures
14	State or locally-designated historic sites, districts, cemeteries or landscapes.
15	Location of any stone walls within or forming the perimeter of the site
16	Archaeologically significant sites.
17	Scenic road corridors and state-designated scenic areas.
18	Viewshed analysis.

d. Recreational Resource Inventory

Trails identified in pre-application may need to be more carefully surveyed in the field, especially where they cross proposed development areas. Trails should be graphically separated into existing (solid line) and potential (dashed line), and colored differently for hiking, biking, boating, etc.

19	_Existing hiking, biking, and bridle trails within and adjacent to site.
20	_Boat launches, lake and stream access points, beaches and water trails.
21.	Existing playfields and playgrounds on or adjacent to the site.

e. Utilities and Infrastructure

Utilities should be shown to the level of detail necessary for planning the most efficient connections to the development, but need not be surveyed in the field. Documentation of capacities of various services should be provided, if applicable.

22	_Size and approximate location of water lines, if common wells are proposed.
23	_Electrical service.
24	_Telephone, cable, and other communication services.
25	_Width and surfacing material of existing road(s) at access points.
26	_Existing drainage and drainage structures, such as ditches, culverts and pipes, etc.

Step 2: Site Context Map

The Contextual Analysis process is described in detail in §IV.A.5 and in the design process §IV.A.7, Step 2 of these Regulations. This information may be based on the information provided at the Pre-application stage of review (Checklist #8), with updates as required.

Using 1997 RIGIS orthophotos, or more recent aerial photography if available, show the area within one-half mile of the development parcel at a scale of l"=400' or as necessary. Outline the parcel boundary. Surrounding parcels, 10' contours, surface waters and wetlands from RIGIS may be overlaid with the photograph if available. After Pre-Application Review, the Planning Commission may request that other resources be overlaid with the context map in order to better understand how the development will affect its surroundings. This may be particularly important in showing how the site fits

into surrounding ecological or cultural systems. These may include regionally-important surface or subsurface water supplies, large stream/wetland systems, continuous blocks of forested land, or extended areas in agricultural use.
1 Site Context Map
2 Soils Map of surrounding area. See Supporting Materials, No. 4.
Step 3: Potential Conservation Areas
The pre-application review, especially Step 3, initiated the designation of potential conservation areas. The Master Plan review will serve to focus on the more detailed mapping of potential conservation areas. More detailed assessment of soils and slope constraints should be based on the specific character of the site and the type of development proposed. Conclusions about "non-buildable" and "partially-constrained" areas of the site will thus be calibrated to fit the specific situation. At the same time, the Planning Commission can identify locations where field testing of soils and water table will be necessary, and the extent of such investigation required for the Master Plan submission.
Non-Buildable Areas
1Wetlands and surface waters including local and state regulated setbacks.
2Surface waters
3Hydric soils
4Ledge/outcrops
5Slopes greater than 25%
6Existing land restrictions such as utility easements, power line right-of-ways, etc.
7Any other land unsuitable for development, as defined in the Zoning Ordinance
Partially Constrained Areas (Physical Constraints to Development)

8.____ Slopes between 15-25%

9.____ 100-year flood plains

10	_Soils with seasonal high water table less than 3.5 feet or slowly-permeable
	"hardpan" soils

Important Natural, Cultural and Recreational Resource Areas

Identify the resources in each category which are the most important to protect; these can be indicated with transparent tones and/or written annotations on the map.

11	Natural resource areas. The natural, cultural, and recreational inventories from
	Step 1 should be used here, and supplemented as necessary with field surveys.
12	Cultural resource areas.
13	Recreational resource areas.

Summary Map

A Summary Map should be prepared, combining non-buildable, partially-constrained and important resource areas into a single overlay. The Summary Map represents a synthesis of the principal conclusions drawn from the previous maps. It therefore serves as a record of what the applicant and the Planning Commission agree are the areas which should be preserved as open space, and likewise clearly identifies the areas most suited for development. It also allows for an agreement on what areas of the site may need to be investigated in further detail, either to better locate the edges of a sensitive resource, or to perform a more detailed survey of features which might be incorporated in the proposed development.

The Summary Map simplifies the previous overlays into three colors:

14	_Non-Buildable Areas
15	_Partially-Constrained Areas
16	_Important Natural, Cultural and Recreational Resource Areas

Step 4: Determine Maximum Number of Units

The applicant and the Planning Commission shall agree on the Basic Maximum Number of Dwelling Units, if changed from the pre-application stage of review. Refer to the

	ion of Step 4 in §IV.A.7 and to §IV.A.10, entitled <u>Basic Maximum Number of</u> <u>ug Units</u> .
1Y	rield Plan drawing(s), with indication of number of units.:
Step 5:	Locate Development Areas and Explore Conceptual Alternatives.
overlay	on the results of Steps 1-3, the applicant prepares a Sketch Plan Overlay Sheet to the Existing Resources and Site Analysis Maps showing the potential ment areas, and at least three conceptual alternatives, where applicable, for the

to

areas will avoid or minimize impacts to the potential conservation areas as shown on the Summary Map in Step 3. The plan should also demonstrate how the proposals would fit into the context as described in Step 2. The Sketch Plan Overlay Sheet shall be prepared for review by the Planning Commission during the site visit. 1.___Potential development areas - show as a tone or boundary line.

2.___Conceptual alternatives - specify number and variables, if possible.

general layout of the proposed development. Refer to Section IV.A.8 entitled Sketch Plan Overlay Sheet. The focus of this Sketch Plan is to demonstrate how the development

3.____Describe house types and/or architectural themes.

Step 6: Locate House Sites

Once a preferred concept is in place, attention turns to selecting house sites that provide high value to potential buyers, with opportunities for creative design, privacy, attractive views and yard space. Potential house sites are also evaluated for potential access, drainage, availability of utilities, and suitability for wells and septic systems. The process of locating house sites should be documented by describing the potential of proposed locations to avoid or minimize impacts to the resources identified in Steps 2 and 3, as well as the visual effect from within and outside the development, and livability for future residents.

A site visit is recommended at this point and prior to establishing final locations to verify that locations avoid or minimize impacts to the conservation areas identified in Steps 2 *and 3.*

- 1. Development Suitability annotate plans to indicate site scale differences in microclimate (such as north-facing areas sheltered from the summer sun but affected by winter winds, or southern exposures good for solar heating), soils, hydrology, or special features affecting construction, such as unique trees or stone walls to be preserved.
- For all proposed wells and OWTS, a general description of their location shall be provided. Location of water table test holes and soil percolation tests, with test hole data, if available.
- 3. Show initial locations for house sites, yards and access driveways
- 4.___ Indicate how the house sites will be connected to or benefit from the dedicated open space.

Step 7: Lay Out Roads, Trails and other Infrastructure

The layout of roads and trails is based on providing efficient access to the preferred house sites, organized by the overall design concept or theme. Several alternatives may need to be explored to find the best balance of community design with physical goals of minimizing pavement and limiting disturbance of the site.

- 1.____ Alternatives for location and alignment of proposed roads and pedestrian system.
- 2.___ Typical cross-section of proposed roads, including buildings, street trees, plantings, fences, curbs, sidewalks and trails, etc. on both sides of the road, along with the width of pavement and shoulders, if any.
- 3.____ Alternatives for stormwater treatment and management with an emphasis on maintaining the natural hydrology, and encouraging the infiltration of precipitation as close to the point of origin as possible. Refer to Step 7 in §IV.A.5, and to Article XIII, Section D for further information regarding stormwater treatment methods. The most recent edition of the Rhode Island Stormwater Design and Installation Standards Manual should also be consulted. Use of Low Impact Development (LID) site planning and design strategies is encouraged.
- 4.___ Concept for placement of utilities including electrical, communications, etc.

Step 8: Design Open Space

Proposed uses and design guidelines for open space areas to be preserved by the project should be carefully planned to take advantage of existing natural, cultural and historical

features and the potential for active agriculture and forestry, and active or passive recreation. The design of open space should flow directly from its proposed use -- farming, stormwater management, habitat protection, recreation, etc. - and respond to the needs of the Town.

- 1.___Map the proposed open space and indicate the proposed uses and design criteria.
- 2. ___Show proposed recreational trails and any potential links to other trails, natural features or amenities on the site or in the context area, and pedestrian connections to other neighborhoods, schools, etc.
- 3.___Plan for active agriculture, silviculture or forestry.
- 4. Conceptual management criteria, including protection of the natural and cultural resources identified in Step 3.

Step 9: Draw in the Lot Lines

As one of the last steps in the design process, the location of lot lines should flow logically from the location of resources, proposed house sites, and existing features of the site. Lot lines should reflect logical boundary locations in the field, such as drainage patterns, stone walls, and tree lines. Easements for utilities and trails are also set down to preserve access to important corridors. If the best locations for lot lines are still unclear at the Master Plan stage, criteria or guidelines for their placement should be described.

Depending on the size of individual lots, building envelopes may be necessary to ensure that houses are built in the desired area of each lot. This can take the form of a "build-to line" showing where the front wall of each house should be placed, a "limit of disturbance line" showing the area that should not be altered, or a building envelope zone, within which the builder can vary the final location and orientation of the house and appurtenances.

- 1. Alternatives for location of lot lines.
- 2.___Location of rights-of-way, utility or trail easements.

Step 10: Establish Ownership and Maintenance of Open Space

In the final step of the process, the applicant should suggest the alternatives for ownership and maintenance of designated open space areas. This may only be

conceptual during Master Plan stage, with the goal of ownership that may take advantage of unique site feati good fit with one of the design alternatives under cons	ures, or which makes a particularly
1Conceptual open space use and management plan	n. See IV.A.11 (1-2).
C. CONVENTIONAL YIELD PLAN	
An updated Conventional Yield Plan, as discussed at the shall be presented for further review by the Planning C	
1 Conventional Yield Plan, if modified from Pre-	application review
D. SUPPORTING MATERIALS	
The applicant shall submit to the Administrative Office description of the existing physical environment and exgeneral description of the uses and type of development narrative report shall include reduced copies of all plants.	xisting use(s) of the property along with a at proposed by the applicant. The
 Application Form Administrative (Filing) Fee. See § XI.D An aerial photograph or a blue line copy of the proposed subdivision parcel and surrounding at 4 A copy of the soils map of the subdivision general analysis of soil types and suitability for the prime agricultural soils are within the subdivision parked to show the location of said prime agricultured soils are within the subdivision parked to show the location of said prime agricultured for a list of names and addresses of all proper parcel perimeter Proposed phasing, if any. Initial written comments on the Master Plagencies (to be provided by the Administrative Operation) 	rea. In parcel and surrounding area, and development proposed. If any parcel(s), the soils map shall be aral soils. In parcel and surrounding area, and development proposed. If any parcel(s), the soils map shall be aral soils. In parcel and surrounding area, and development proposed. If any parcel (s), the soils map shall be aral soils. In parcel and surrounding area, and development proposed. If any parcel (s), the soils map shall be arall soils. In parcel and surrounding area, and development proposed. If any parcel (s), the soils map shall be arall soils. In parcel and surrounding area, and development proposed. If any parcel (s), the soils map shall be arall soils. In parcel (s), the soils map shall be area (s) area (s
Local Agencies	
APlanning Department	Date:
BTown Administrator	Date:

CPublic Works	Date:
EBuilding Official	Date:
FSolicitor	Date:
GConservation Comm.	Date:
HPolice Dept.	Date:
IFire Dept.	Date:
J. Other (specify)	Date:
State agencies	
AEnvironmental Management	Date:
BTransportation	Date:
CCoastal Resources	Date:
DOther (specify)	Date:
Federal agencies	
A U.S. Army Corps Engineers	Date:
B FEMA	Date:

F. CONCLUSIONS/OUTCOMES FROM MASTER PLAN REVIEW

Following certification of a complete Master Plan submission, the town has 120 days to approve the Master Plan as submitted, deny the plan, or approve with conditions. As this formal approval proceeds, it is critical to the ongoing design process that the applicant and the town reach a clear and mutual understanding about the character of the site and the best way to develop it. Whether incorporated into the written approvals or not, these agreements record the conclusions of the Master Plan review and establish review criteria for the Preliminary Plan:

Agreement on areas for further investigation, soil tests, borings, necessary detail of field surveys, etc. to be done for the Preliminary Plan submission.
Agreement on location and function of natural, cultural and recreational resources.
Agreement on function and value of resource systems within the site's larger context.
Agreement on location of potential conservation and development areas.
Agreement on basic maximum number of units
Agreement on design and uses of open space areas, trail connections, and other shared amenities.
Agreement on location and design of streets, home sites and other elements.
Agreement on criteria for establishing lot lines, pending further site surveys and analysis.
Agreement on ownership, maintenance and management responsibility of open space areas.
Agreement on relevant town goals for the area.