ENGINEERING AND SURVEYING

MAJOR LAND DEVELOPMENT IN RHODE ISLAND

PREPARE THE BASE PLAN

- Compile State & Town GIS Data
 - LIDAR, Assessor Maps, Wetlands, Soils, FEMA...
- Zoning and Land Use Review
- Conceptual Site Layout Plan
- Soil Evaluations
- Wetland Delineation
- Request to Verify Wetland Edge (as needed)

PREPARE A PRE-APPLICATION PLAN & SUBMISSION

Pre-Application Plan Submission

- Cover, Aerial, Resource Map, and Site Layout Sheets
- Dimensional/Development/Parking Calculations
- Pre-App Application and Checklist
- Compilation of Materials for Initial Submission

MASTER PLAN - VESTING THE PROJECT

Master Plan Submission

- Creation of Cover, Aerial, Resource Map, and Site Layout
 Sheets
- Dimensional/Development/Parking Calculations
- Application, Narrative Letter, Checklist, and Radius Map
- Compilation of Materials for Initial Submission

PRELIMINARY PLAN / DPR PLAN PREPARATION & SUBMISSION LET THE WORK BEGIN

- Class I Comprehensive Boundary Survey
- Class T-2 Topographic Survey
- Creation of a Permitting Plan Set per the Municipality's Checklist
- Roadway / Utility Plans and Profiles
- Grading/Utility Plans
- Landscape Design Plan
- Construction Detail Sheets

PRELIMINARY PLAN /DPR PLAN PREPARATION & SUBMISSION LET THE WORK BEGIN

- Stormwater Analysis and Drainage Design
- Soil Erosion and Sediment Control Site Plan
- Stormwater Report
- Preliminary OWTS Sizing and Layout
- Utility Letters of Availability Sewer, Water, Electric, TeleCom
- Water and Sewer Service Connection Design
- Record Subdivision Plans
- Application, Checklist, and Radius Map

Request for Preliminary Determination – RIDEM

- RIDEM Submission Plans
- RIDEM Wetlands Application
- RIDEM Stormwater Construction Permit Application
- RIDEM Appendix A Stormwater Checklist and Supporting Documentation
- RIDEM Site Work Affidavit
- RIDEM Avoidance and Minimization Report
- Soil Erosion and Sediment Control Plan & Report
- Drainage Operation and Maintenance Plan

CRMC Assent Plan Preparation and Submission

- CRMC Submission Plans
- CRMC Application and Checklist
- CRMC Proof of Property Ownership
- CRMC Avoidance and Minimization Report
- Soil Erosion and Sediment Control Plan
- Soil Erosion and Sediment Control Report
- Operation and Maintenance Plan

RIDOT Physical Alteration Permit Application

- RIDOT PAPA Submission Plans
- RIDOT Bond Estimate
- RIDOT Application and Checklist
- RIDEM Subdivision Site Suitability
 - RIDEM Application and Checklist
 - RIDEM Site Suitability Submission Plans

Other State Applications

- CRMC Request for Preliminary Determination
- Department of Health Drinking Water
- RI State Historic Preservation Office
- RIDEM Office of Land Revitalization and Sustainable Materials Management

MUNICIPAL APPROVALS / REVIEWS

- Water Authority Submission
 - Water Application and Checklist
 - Compilation of Materials for Submission
- Sewer Authority Submission
 - Sewer Application and Checklist
 - Compilation of Materials for Submission
- Public Safety Fire & Police
- Department of Public Works

FINAL PLAN /DPR PLAN PREPARATION & SUBMISSION AT THE FINISH LINE

Final Plan Submission

- Final Modifications to Plan Set per the Municipality's Checklist
- Final Record Subdivision Plan
- Final Plan Application and Checklist
- Compilation of Materials for Submission

Record Final Record Subdivision Plan Mylar

Let the Construction Begin

OTHER RESPONSIBILITIES OF THE ENGINEER / SURVEYOR

- Abutters List & Radius Map
 - Master Plan, Zoning Variance, Zoning Special Use, Development Plan Review, Preliminary Plan, Zone Change, OWTS Variance, RIDEM Application to Alter
- Certified Mailings & Public Notifications
- Meetings & Coordination with State & local Municipalities

A. APPLICATION REQUIREMENTS

- A1. Name and address of property owner(s) and applicant(s)
- A2. Application cover sheet and fee paid
- A3. Sufficient number of plan copies (15 copies if the plan for Major and Minor Projects, and for Administrative Subdivisions (2 copies with original submission) and 2 mylars and 5 paper copies (for recording with the Town Clerk's office)
- A4. Plat and Lot numbers of site location;
- A5. Tax Assessor's Field Card(s) for subject lot(s) (provided by Tax Assessor's office)
- A6. Municipal lien certificate documenting that there are no taxes due on the property (provided by the Town Tax Collector's office)
- A7. Proposed deed with metes & bounds descriptions for all proposed conveyances and resulting lots
- A8.A list of names of each abutter; and 3 sets of self-adhesive address labels of abutter's names/addresses

B. REQUIRED ON PLAN

PROJECT DETAILS

- B1. Name and address of property owner(s) and applicant(s)
- B2. Name of project; submission type and stage of submission.
- B3. Tax Assessor's Plat and Lot number(s)
- B4. Name, signature and RI registration number of professional engineer or land surveyor responsible for the plan submitted
- B5. Zoning District(s), including minimum area, dimensions and setbacks.
- B6. Plat and lot location and with names and addresses of each abutter.
- B7. Date of plan preparation, with revision date(s) (if any)
- B8. Total Area of subdivision or land development project
- B9. Existing and proposed property lines and building setback lines

B10. Wetalands (if none, state on Plan)

BII.Proposed area(s), angles and dimensions of the parcel(s) and street(s)

B12.Existing and proposed area(s) and dimensions of the parcel(s) being subdivided

B14.Location, width and names of platted streets within or directly adjacent to the parcel being re-subdivided

BI5.Proposed utilities, manholes, catch basins, pits, etc. (if none, state on Plan)

B16.Existing easements (if none, state on Plan) and proposed deed or plat restrictions or protective covenants (if none, state on Plan)

B17. Total area of all lots and roadways involved in project

B18.A proposed phasing plan (if none, state on Plan)

PLAN FORMAT

B19.Plan scale shall be no smaller than one-inch equals eighty feet

(I"= 80'). The scale may be modified with the permission of the Administrative Officer.

B20.Sufficient Plan Size. Plans may be reduced to $11" \times 17"$ provided that they are still legible, as determined by the Administrative Officer. Number sheets sequentially.

Administrative Subdivision: Mylars for recording shall be 18" \times 24" or 24" \times 36" in size. Other plans may be reduced to 11" \times 17" provided legible, as determined by the Administrative Officer. Sheets shall be numbered sequentially.

B21.A location map showing the physical relationship of the proposed project to the area within a radius of 1/2 mile. Said location map (USGS or comparable may be used) shall identify location of all brooks, streams, ponds, lakes, wetland area, public drinking water reservoirs, and public wells within 1,000 feet of the project.

B22. Lettering shall be neat and legible and shall not be smaller than 1/8"

B23. Graphic scale and true north arrow

C. Master Plan

- C1. Analysis of buildable lot area. The analysis shall include a constraint plan illustrating constraints and indicating the square foot areas of all applicable constraints as itemized in the Regulations and an estimated limit of disturbance.
- C2. Analysis of potential neighborhood/district impacts
- C3. Tentative construction phasing illustrated on plan
- C4. Topographical conditions, existing man-made structures and natural site features on the lot(s) to be subdivided and/or developed and on abutting lots
- C5. Approximate topographic conditions
- C6. Approximate locations of reservoirs and their tributaries, water bodies, watercourses, and wetlands (if none, state on Plan) on property
- C7. Location of private wells and septic systems within 200' of the project
- C8. Verification of wetland edge by the RI DEM (if no wetlands on property, state on plan)
- C9. Land proposed for public dedication

D. Preliminary Plan

- D1. Water Department Certification by the Superintendent that the proposed water service is acceptable and that water can be provided to the proposed project. Location of fire hydrants shall be determined by the Water Department in cooperation with the local fire department. If water is to be provided by a water system other that the Water Department similar certification and hydrant location is required.
- D2. Sewer Department Certification that the proposed sewer layout is acceptable and can accept the effluent load of the proposed project.
- D3. Police Traffic Advisory Report as to the need for and location of traffic control signs or other traffic control devices as well as any required ordinances deemed necessary for traffic control.
- D4. Fire Department Advisory Report
- D5. Construction phasing illustrated on plan
- D6. RIDEM Preliminary Site Suitability Determinations as to the suitability of the soils for the operation of ISDS septic systems
- D7. Ground elevation data referenced to mean sea level and illustration of floodplains in accordance with Federal flood insurance maps and reports
- D8. Topographic contours at 2' intervals; illustrate other conditions such as ledge outcroppings and appropriate setback lines to all brooks, reservoirs, streams, ponds, lakes, wetland areas, drinking water supplies and other waterways within 200' of the proposed project (if none, state on the Plan).
- D9. Proposed areas to be dedicated as open space & ownership/maintenance proposals

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- D10. Proposed street names (Names shall not be a duplicate of, or closely resemble, existing street names) contact Rescue Department to verify
- DII. Existing and proposed water line, sewer line, drainage line and all manholes, catch basins including location and dimensions of each and data that supports their sizing and design
- D12. Existing and proposed easements, plat restrictions and/or covenants; include draft legal documents (if none, state on Plan)
- D13. Existing and proposed curb lines and driveway openings
- D14. Location of existing and proposed permanent monuments
- D15. Location of existing and proposed fire hydrants
- D16. Location of existing private wells within two hundred 200' of the proposed project, locations of wells within the project, and the location and type of public wells within 800' of the project.
- D17. Location of existing cesspools, septic systems, seepage pits, or other sewerage disposal systems within 200' of the project
- D18. A soil erosion and sedimentation control plan
- D19. Identification of any land located within public drinking water supply areas
- D20. Location of all permanent monuments. A definite bearing or angle and distance tie shall be shown between permanent monuments on the existing boundary of the proposed development and existing street intersections or other existing permanent monuments. Preliminary only requires location.

D21. Identification of storm water controls and data that supports sizing and design

D22. Engineered centerline profiles of proposed streets containing, as appropriate: existing and proposed street grades, sewer mains, water mains, all other underground utilities, and drainage

facilities. Profile scale shall have a horizontal scale of 1"=40 and vertical scale of 1"=4.

D23. Street ROW cross-section detail illustrating all utilities, sidewalks & trees

D24. Street signs and traffic calming measures, as appropriate

D25.A landscape plan prepared by a RI registered Landscape Architect identifying the location of existing tree cover, location and common name of individual trees of I6-inch diameter or greater within 50 feet of the right-of-way and the location of proposed trees

D26.A street lighting plan, showing the location of proposed lights and the existing lights within 50' of the proposed development

D27.A letter requesting a performance guarantee sufficient to cover the cost of required improvements or other request as required by Section 4(A) of the regulations

D28. All necessary State and Federal permits

D29. Identification of flood areas in accordance with the flood hazard regulations

D30. If wetlands are located within the project area, a written determination from RI DEM is necessary documenting either that the Wetlands Act does not apply, or that the proposal will result in an insignificant or significant alteration as granted by evidence of a permit. Copies of DEM stamped plans and permits along with any conditions shall be submitted

D31. Demonstrated compliance/submission of any materials required as a condition of Master Plan approval; Any other information or data which is relevant to good land planning and design

E. Final Approval

- E1. Approved performance guarantee and proof of payment of inspection fees
- E2. Location of all permanent monuments. A definite bearing or angle and distance tie shall be shown between permanent monuments on the existing boundary of the proposed development and existing street intersections or other existing permanent monuments. Preliminary only requires location.
- E3.All executed deeds for conveyances and resulting lots
- E4. Quitclaim deed conveying all street ROWs and other legal documents such as deed restrictions, protective covenants, easements
- E5. Written certification by a registered professional engineer that all drainage structures and facilities will accommodate a 100-year frequency rainfall event
- E6. The approved Preliminary Plan including construction details, landscaping, soil erosion, lighting, etc. Plans and accompanying materials shall include and clearly illustrate all modifications directed by the Board during previous stages of review
- E7. Any conditions of approval or waivers/variances granted should be identified on the plan
- E8. Any State and Federal permits that have been obtained or have been changed/extended since submission with the Preliminary Plan

- E9. Certification by a Title Attorney or comparable legal professional that no Notice of Violation of the Wetlands Act is on file in the Land Evidence records pertaining to the lot(s) being considered for subdivision or development
- E10. Demonstrated compliance/submission of any materials required as a condition of Master Plan approval; Any other information or data which is relevant to good land planning and design
- EII. Copy of the Zone change ordinance, if applicable
- E12. Any and all unpaid balances (ex. Abutter's notice etc.) must be paid before the final recording.
- E13. Copies of digital files on magnetic or optical media are required.
- E14. Approval Block located in the right-hand corner of the plans