Town of Glastonbury Engineering Division
Subdivision Plan Review Checklist

PROJECT INFORMATION	
Approval Type:	Subdivision PAD ARZ Other:
Design Engineer Firm:	
Project Name:	
Project Address:	
Submittal Date:	
Review Date:	
Reviewed By:	

	GENERAL PLAN CHECKLIST
	Maps prepared in accordance with the “Minimum Standards for Surveys and Maps in the State of Connecticut” as adopted by the Connecticut Association of Land Surveyors, Inc. on September 26, 1996, as amended.
	Coordinate System Identified (NAD 83, NAVD 88 required)
	Label NAD83 coordinates and identify control points and bench marks
	Location Plan (1” = 1000’, including outline of property or site area)
	North Arrow, Plan Scale, Date
	Sealed by a CT Licensed Land Surveyor or Professional Engineer as Applicable
	Note indicating Contractor requirement to “Call-Before-You-Dig” prior to any construction
	Complete legend identifying existing and proposed features
	Town Approval block included on all sheets to be filed
	Separate sheet included in plan set for Town approval motions and Department review memos
	Parcel boundary closure check performed by Engineering
	Addresses assigned to any newly created or combined parcels
	Street Names identified for private roads or private drives to be named for addressing purposes
	Standard Inspection Note on all applicable sheets stating: NOTE: THE CONTRACTOR SHALL NOTIFY THE TOWN OF GLASTONBURY ENGINEERING DIVISION 24 HOURS PRIOR TO BEGINNING ANY STORM DRAINAGE, SANITARY SEWER INSTALLATION, ROADWAY PREPARATION, PAVING, SIDEWALK, CURBING, OR ANY EXCAVATION IN THE TOWN RIGHT-OF-WAY TO SCHEDULE INSPECTIONS. THE DIVISION CAN BE REACHED BETWEEN 8:00 AM-4:30 PM MONDAY THRU FRIDAY AT (860) 652-7735.

	SUBDIVISION PLAN CHECKLIST
	a. General Information
	Title Box as per Office of Community Development
	Sheet Index Map (Title Page) including location map
	Name of Subdivision
	Name of Applicant
	Date of Map and Map number or identification
	Certification by a CT Licensed Land Surveyor that map confirms to A2 survey
	Surveyor statement: “The Subdivision Regulations of the Town of Glastonbury, Town Plan and Zoning Commission are part of this plan and approval of this plan is contingent on compliance with all requirements of the said Subdivision Regulations.”
	Lot lines and overall boundary survey to accuracy of a one one-hundredth of a foot.
	b. Specific Information
	Zone of parcel and abutting property.
	Names and owners of property and abutters at time of application
	Lots appropriately numbered.
	Size of overall parcel, and size of lots in square feet and acres..
	Proposed building Lines
	Existing and Proposed Streets
	Ends of street closed by bearing and distance. Curves along right-of-way dimensioned by length, radius, tangent, and delta.
	Existing and proposed pins, monuments (ROW and Open Space) and conservation easement markers.
	Rights-of-way reserved for future streets
	Street Names (existing and proposed)
	Existing and Proposed Easements and Rights-of-way with ownership.
	NAD 83 coordinates labeled at four points on the subdivision perimeter
	c. other information
	Subdivision parcel closure checked by Engineering Department

	SUBDIVISION SITE DEVELOPMENT PLAN (TOPOGRAPHIC MAP) CHECKLIST
	a. General Information:
	Title Box as per Office of Community Development
	Name of Subdivision
	Name of Applicant
	Date of Map and Map number or identification
	Plans certified by CT Licensed Land Surveyor and Professional Engineer
	b. Specific Information:
	Contours at 2 foot intervals (or 0.5 foot intervals in Flood Zone areas) with spot elevations at highpoints and depressions, based on NAVD 1988. *(Include a minimum of two (2) benchmarks per sheet based on NAVD 1988. Depict grading for the entire site.)*
	Source of topography noted on plan (field survey, town aerial photogrammetry, etc). Confirm that field survey meets minimum requirements of subdivision regulations.
	Locations and elevations of existing sanitary sewer *(including all bends, manholes and appurtenances with pipe sizes, slopes, materials and invert elevations within structure*
	If no sewers: available, test pit locations, boring data, percolation test data, existing soil classification, and locations of leach fields on site and within 150' of property lines (or 75 feet per Health Director)
	Location of existing and proposed water and/or gas mains, public or private hydrants, and community wells
	Location of existing and proposed wells, within 150' of property lines (or 75 feet per Health Director)
	Existing and proposed storm drainage facilities, including structure types, pipe size, slopes, materials, invert elevations, and connections to existing drainage systems, wetlands or watercourses. Underdrains where appropriate. *(RCP only in Right of Way, Cleanouts for underdrains at 150 foot intervals)*
	Existing building and historical landmarks including stone walls *(Note items to be protected or demolished)*
	Significant natural and scenic resources
	Watercourses (with flow direction), ponds, and wetlands and associated upland review area with soil scientist certification.
	Location of trees to be saved or planted
	Proposed limits of clearing, with specimen trees noted for protection
	Proposed grades throughout site, highlighting slopes greater than 20%.
	Designated building areas with proposed driveway locations, limits of clearing, and approximate grading.
	Existing driveways on neighboring properties within 100' of the property lines.
	FEMA 1% Annual Chance Flood Zone Limits(derived from Flood Profile Data, as applicable)

	Relationship of existing and proposed road layouts, drainage and utility systems, wetlands, watercourses, conservation easements, public and private easements and rights-of-ways, and open space within the subdivision and on adjacent land.
	Significant geological features such as eskers, kames, kettles, etc.
	Limits of earth cuts and fills
	c. Soil Erosion and Sediment Control
	Soil Erosion and Sediment Control measures per the 2002 E&S Guidelines incorporated into site development plans unless separate plans directed by Environmental Planner. (including narrative, area of disturbance in acres, phasing as required, construction entrance, silt fence, sediment basins, etc)
	Obtain CT DEEP Construction General Permit for projects that disturb 5 acres or more.
	d. Other Items
	Proposed building elevations for top of foundation wall, garage, first floor and basement
	Identification of proposed basements requiring sump pumps
	Proposed foundation drains showing invert levels indicating gravity flow (piped discharges into the public right-of-way are prohibited by ordinance)
	Proposed roof leaders with infiltration systems and overflow
	Rear yard drainage appropriately addressed. Confirm no concentrated discharge on to abutting private property.
	Retaining walls with top and bottom of walls elevations noted. Confirm no grading or construction impacts on to abutting private property.
	Sight line adequate at proposed driveway locations
	Traffic control devices, pavement markings and signs
	Rear Lot Drives widths (16 feet for 1 or 2 lots, 20 feet for 3 lots). Paved driveway for 8% slope or greater, not to exceed 15% grade
	Guide rail and protective fencing as required for grading
	Sidewalks and sidewalk ramps **Sidewalks continuous through driveways, check for current Town details**
	Plantings minimum 10 feet away from sidewalks to avoid root intrusion, minimize plant obstruction complaints

	SUBDIVISION CONSTRUCTION PLAN (ROAD PLAN AND PROFILE) CHECKLIST
	a. General Information:
	Title Box as per Office of Community Development
	Name of Subdivision
	Name of Applicant
	Date of Map and Map number or identification
	Note stating “All construction shall be in accordance with Town of Glastonbury Specifications or as approved by the Town Engineer”
	b. Roadway Plan and Profile:
	Plan scale 1” = 40’, certified by a CT Licensed Professional Engineer
	Existing building and all property lines within fifty (50) feet of the edge of any rights-of-way or limit of construction
	Existing and proposed streets with stationing noted at all points of curves, points of tangent, and high or low points
	Confirm horizontal curves conform to required design speed
	Storm drainage pipes and structures. Elevations shall be shown for tops of frames, inverts, and flow lines of all structures.
	Sanitary sewer pipes and structures. Elevations shall be shown for tops of frames, inverts, and flow lines of all structures.
	Location, width, and type of all existing and proposed sidewalks
	Existing utility corridors subject to the availability of documented “asbuilt” data. Proposed utility corridors by locations or note on the plans.
	Limits of construction
	c. Roadway Profile:
	Scale 1” = 40’ horizontal, 1” = 4’ vertical, certified by a CT Licensed Professional Engineer
	Existing profile based on actual field elevations and proposed profile along the centerline of all proposed streets *(label grades at 50 foot intervals max)*
	Existing and proposed profiles along centerline of all storm drainage and sanitary sewer located outside of street right-of-way (label grades at 50’ intervals max)
	Roadway: percent grade, elevations at all points of vertical curve and tangent, high and low point elevations, curve length, along proposed street centerline. *(Vertical curve SSD also required by Public Improvement Standards)*
	Confirm vertical geometry conforms to required design speed.
	Storm Drainage, underdrains, and sanitary sewers: Percent grade, size, type and class of pipe, and structure locations and stationing *(RCP only in Right-of-way, cleanouts for under drains at 150’ intervals)*

	d. Intersection Grading Plan:
	Intersection grading plans shall be provided at a scale of 1" = 20', 0.5' contour interval max (at the discretion of the TPZ or Town Engineer).
	e. Roadway Cross Sections:
	Cross sections at a scale of 1"=5' or 1" = 10' provided at 50 foot intervals for all proposed and reconstructed streets having cuts or fills greater than 4 feet (at the discretion of TPZ or Town Engineer).
	f. Other requirements (Per Public Improvement Standards):
	Check horizontal sight distance for curves, identify need for sight-line easements
	Label Stopping Sight Distance for vertical curves
	Station equation and centerline elevations at proposed intersections
	Limits of sawcut and pavement removal for connection to existing roads
	Typical cross-section of the street in accordance with the Public Improvement Standards (confirm width, ROW, pavement depth)
	Soil boring data that adequately depicts existing subsurface conditions (when requested by Town staff or the Commission)
	Cul-de-sac radii per Town Standards (55 foot ROW, 45 foot pavement)
	Cape cod curb specified in the cul-de-sacs
	Roadway profile grades at intersection maximum of 3% for minimum 100 feet
	Traffic control devices, pavement markings and signs. Street Name sign, Stop sign, Stop Bar
	Proposed sidewalks (1' in front of street line) and sidewalk ramps *Sidewalks must be continuous through driveways*
	Limits of proposed underdrains (with cleanouts at 150' intervals) *Include note: "Underdrains shall be installed to address wet conditions as directed by Town Engineer"*
	Cross-sections and profiles of all drainage ditches and channels
	Guide rail and other protective fencing *Include note: "Guiderail shall be installed within 60 days of binder course paving."*
	Detailed Grading Plan at a scale not to exceed 1" = 10' for removal of existing cul-de-sac
	Location of proposed streetlights as applicable
	Quantity Estimate Submitted by Design Engineer for Bond

	STORMWATER MANAGEMENT REPORT CHECKLIST
	Report signed by CT Licensed Professional Engineer
	Narrative summarizing the proposed project, design methods used, and table of pre- and post–development flows at appropriate downstream locations showing zero net increase in runoff from the site for the 2, 10, 25, 50 and 100-year storm events. Summarize WQV required for the project area and the WQV retained by the proposed improvements.
	Hydrographs and calculations identifying peak runoff, velocities and timing of peak flows from the site at critical locations in the watershed as outlined in the CTDOT Drainage Manual, latest revision. Supporting information for the drainage analysis including, but not limited to, runoff coefficients, time of concentration flow paths, drywell design, etc.
	Confirm use of SCS hydrology methods for proposed detention, including latest NOAA Rainfall rates and Type III rainfall distribution.
	Inventory and evaluation of hydraulic structures both on-site and in the downstream zone of influence (as defined in the Public Improvement Standards) to identify flow capacity, pipe velocities, hydraulic grade line elevations and physical condition
	Identification of drainage structures and watercourses that are inadequate for existing or future conditions
	Hydraulic grade line computations for enclosed drainage systems indicating a minimum headwater clearance of one (1) below top of frame for existing and proposed structures.
	Detention basin design information that includes stage-storage-discharge curves or tables, outlet control data, flood routing calculations, subsurface conditions and maximum water surface elevations
	Outlet protection, riprap sizing, channel sizing, and channel lining calculations
	Gutter flow analysis and ponding calculations for low points (when requested by the Town Engineer)
	Plans with scale not to exceed 1” = 100’ identifying topography, watershed boundaries (for overall site and storm drainage structures), soil types, land use characteristics and time of concentration flow paths with design points and labels corresponding to the drainage calculations for pre- and post-development conditions
	Plans with 100-year flood limits derived from Flood Profile data provided in the latest version of the FEMA Flood Insurance Study (if applicable), inland wetland boundaries, and groundwater protection zones within the project limits
	Computations of the required Water Quality Volume (WQV) to be retained on site for the project area and for the area draining to each proposed treatment system, include pre and post development impervious area and directly connected impervious area (DCIA). For redevelopment of sites that are currently developed with DCIA of 40% or more, **one-half of the WQV** from the site must be retained, **for all other sites the full WQV must be retained**.)
	Computations of the WQV actually retained by the proposed treatment system(s). NOTE: Only storage below the low-flow orifice of an outlet control structure can be considered retained for computation of the WQV. Slow release of the WQV over a 24 to 48 hour period via infiltration or a small diameter orifice will also be considered as retained for the purposes of these computations.
	WQV surface elevations clearly labeled and depicted on appropriate cross sections and details within the plan set. WQV retained by each proposed treatment system labeled on the plans.
	Town of Glastonbury MS4 DCIA tracking table accurately filled out and affixed to the site plan and/or drainage plan sheets within the plan set.

STORM DRAINAGE CHECKLIST	
	Plans certified by CT Licensed Professional Engineer
	Existing and proposed storm drainage facilities, including structure types, pipe size, slopes, materials, invert elevations, and connections to existing drainage systems, wetlands or watercourses
	Outlet protection properly detailed, labeled with length, width, depth, type of riprap, geotextile, etc.
	RCP only within Town right-of-way. Minimum pipe size 15", or 18" for cross culverts
	Water Quality Volume treatment measures in compliance with Town Standards and the Town MS4 Permit.
	Maintenance plan and schedule for all public and private stormwater management facilities **including party responsible for maintenance** shown on the site plan or utility plan as applicable
	Deep sump catch basins for water quality where applicable. 2' sump for detention basin outlet structures.
	Sedimentation structures per Town Standards, installed in off-line configuration
	Channels and swales properly sized, lining specified and computed
	Appropriate drainage easement for Town facilities
	Bolted covers noted for off-road public storm drainage manholes
	Appropriate details for non-standard structures
	No concentrated stormwater discharges to neighboring properties or public roadway
	Infiltration or subsurface detention facilities properly sized per drainage computations. Include overflow to town system where possible, inspection ports for maintenance, above groundwater elevation per test pits.
	Confirm detention facility outlet structure details match drainage computations
	Test pit data shown on plan for infiltration and subsurface detention systems

TOWN DETENTION BASIN CHECKLIST	
	Outer pond berm located minimum 100 feet from nearest designated residential building area
	Forebay sized for WQV (use stone filter berm)
	Bottom sloped at 1% toward outlet, Side slopes 4:1 or flatter for ease of maintenance
	Underdrain to ensure complete emptying of basin in 48 hours
	Emergency spillway sized properly with stable discharge point
	2 foot sump on outlet structure. Outlet structure details consistent with drainage computations
	Storm elevations depicted on plan and cross section
	Cross sections of the embankment and spillway
	12' maintenance access road to forebay and outlet structure per Town Standards
	DEEP DAM registration for when over 20 feet deep or 50 acre-ft of storage

	SANITARY SEWER CHECKLIST
	Plans certified by CT Licensed Land Surveyor and Professional Engineer
	Existing and proposed sanitary sewer facilities, including all bends, manholes, appurtenances with pipe sizes, slopes, materials and invert elevations within structures
	Existing sewer laterals identified properly per record drawings
	Minimum cover 4 feet for public sewer
	Sewer laterals properly designed and specified per Town Standards (6-inch PVC minimum, cleanouts as required)
	Sampling manhole provided for all commercial and industrial buildings at street line (unless lateral connects directly to an existing manhole)
	Grease Trap or AGRU for Class III or IV Food Service Establishments (FOG Requirements)
	75 foot separation of pump chamber, septic tanks, or grease trap from wells
	Appropriate sewer easement for Town facilities (25 foot wide). Must provide access to all structures with load bearing surface, grade of 15% or less. Consider need for construction easements.
	Bolted covers noted for off-road public sewer manholes
	Appropriate details for non-standard structures.