

- “Second Floor Plan,” “Typical Floor Plan,” “Roof Plan,” and “Building Materials,” St. Andrew’s Episcopal Church, 1231 Washington Boulevard, Stamford, Connecticut, Sheets A-102, A-103, A-104, and A-205, by Do H. Chung and Partners, dated May 29, 2009.
- “Drainage Summary Report,” St. Andrew’s Episcopal Church, Located at 1231 Washington Boulevard, Stamford, Connecticut, Prepared for St Andrew’s Episcopal Church, , by Rocco V. D’Andrea, Inc., dated May 29, 2009.
- “Hydraulic Summary Report,” St. Andrew Episcopal Church, Located at 1231 Washington Boulevard, Stamford, Connecticut, Prepared for St. Andrew’s Episcopal Church, by Rocco V. D’Andrea, Inc., dated May 29, 2009.
- “Flood Preparedness Plan,” Prepared for Occupants of 1231 Washington Boulevard, St. Andrews Episcopal Church, Holly House, Stamford, Connecticut, by Rocco V. D’Andrea, Inc., dated July 6, 2009 (Draft).
- “Flood Preparedness Plan,” Prepared for Residents of Parcel “A”, Washington Boulevard and Franklin Street, Stamford, Connecticut, by Rocco V. D’Andrea, Inc., dated July 6, 2009 (Draft).
- “Correspondence from Renee Kahn, Director, Historic Neighborhood Preservation Program, Inc, dated June 30, 2009.
- Correspondence from Derek Daunais, P.E., Rocco V. D’Andrea, Inc., dated July 7, 2009 and July 9, 2009.
- Correspondence from William J. Hennessey, Jr., Esq, Sandak Hennessey and Greco, dated July 7, 2009.
- Correspondence from Donald T. Parrott, Arborist, Connecticut Arborists, Inc., dated July 2, 2009.
- “UST Removal Closure Report,” Prepared for TAG Washington Boulevard, LLC, by Vertex Environmental Services, Inc., dated January 11, 2006.
- “Sidewalk Connection at UCONN, St. Andrews Episcopal Church, 1231 Washington Boulevard, Stamford, Connecticut by Wesley Stout Associates, dated June 26, 2006.
- Correspondence from Frank Baker, Esq., Robinson and Cole, LLP, dated July 1, 2009.
- Correspondence from Annie Huang, Do Chung and Partners, dated July 9, 2009.

REGULATED ACTIVITIES:

Permission to construct a multi-family residential building (94 residential units), parish hall, parking, drainage, landscaping, accessway, walls, and other related improvements within the base floodplain of the Rippowam River.

APPLICATION HISTORY:

On or about June 9, 2009, the Environmental Protection Board received the subject permit application (1231 Washington Boulevard, Lots A and 7, Parish of St Andrews Protestant Episcopal Church and RMS Washington Boulevard, LLC, #2912, 6/09).

On June 9, 2009, copies of the application and plans were transmitted to local libraries (Talamelli to Gong, 6/9/09 and 7/1/09 and Talamelli to Baldwin, 6/9/09 and 7/1/09) and the Town Clerk (Talamelli to Loglisci, 6/9/09 and 7/1/09) in accordance with the regulations.

On June 9, 2009, initial plans and reports were referred to the Stamford Engineering Bureau for review and comment (Talamelli to Gentile, 6/9/09).

On June 18, 2009, the EPB accepted the permit application (Talamelli to Hennessey, 6/24/09, P 7001 0360 0002 8047 2297).

On June 21, 2009, EPB Staff conducted its initial review of the subject permit application, finding that the following additional information was warranted to assess potential development impacts and establish consistency with the provisions of the "Inland Wetland" and "Flood Prone Area Regulations of the City of Stamford" (Talamelli to D'Andrea, 6/21/09):

1. Arborist's assessment of significant trees of value, a review of any alternatives to incorporate existing trees of value into the overall site development plan, and the development of recommendations to preserve important specimens during and post construction. Of particular interest is the 36" Pin Oak proximate to the "Proposed Holly House." Note that at least one of the trees slated for protection may not be worthy of preservation. All drawings shall be coordinated to reflect the arborist's recommendations.
2. Any available alternative grading, design layouts to reduce overall site imperviousness and preserve existing resources of value.
3. Relocation of the proposed oil/grit separators to provide for their use prior to any discharge to the infiltration devices. The concept is to intercept oil, grit and other sources of pollution prior to a discharge to surface or groundwaters.
4. Positive endorsement of the conclusions, methodology and design described on the submitted plans, drainage report, and hydraulic summary report by the Stamford Engineering Bureau. Note that this office forwarded copies of the pertinent plans and reports to the Engineering Bureau on June 9, 2009 (Talamelli to Gentile, 6/9/09).
5. Provisions for the removal of all existing in-ground tanks and transmission lines.

6. Revisit the proposed streetscape scheme to ensure consistency with City streetscape standards and the improvements applied to the adjoining properties - particularly to the south. The composition of the amenity zone (grass/trees v. brick pavement in the areas between the curb and walkway) and sidewalk alignment should be reviewed and coordinated with Zoning Staff (Norman Cole, 977-4714).
7. Revisit the proposed measures to address important concerns pertaining to access and flood evacuation/preparedness as follows:
 - Regarding the submitted flood preparedness plans - update radio and television call letters and frequencies (Residential), provide directional and turn by turn directions for evacuation routes (Residential), provide all referenced attachments (Holly House), etc.
 - Identify any possible dry or near dry vehicular evacuation routes for patrons of the Church and Holly House – perhaps involving parking curb cuts and a slightly expanded sidewalk/exist point along the cemetery property.
 - Develop a sketch summarizing flood depths and velocities over the anticipated vehicular/pedestrian evacuation routes. A statement concerning the anticipated duration of the flood event may also be helpful.
 - Addition of appropriate signage to the interior of buildings, and along chosen evacuation routes to promote safe and orderly egress.
8. Plans, sections and elevations, by a Connecticut Engineer or Architect, showing the floodproofing measures necessary to confirm compliance with the provisions of Stamford's "Flood Prone Area Regulations." Based on our review of the submitted plans, it appears that the proposals shall be modified to include the following:

Holly House:

- All plans, sections and elevations shall show the appropriate base flood elevation (22.8 feet NGVD), minimum elevation standard (23.8 feet NGVD), and FIRM map references (090015-0007D, 11/17/93).
- Floodproof design of the proposed crawl space and foundation system with appropriate interior/exterior elevations noted.
- Revision of the crawl space floor elevation to the minimum elevation standard of 23.8 feet NGVD unless all design requirements outlined in the sections pertaining to "Fully Enclosed Areas Below the Minimum Elevation Standard" are applied.
- Pertinent elevation of all floors and utility spaces shall be noted in NGVD.
- Location/elevation of all exterior utility meters and junction boxes. Note the bottom of all such facilities shall be above the MES.

- Location/elevation of any exterior AC condensers, generators, ground level transformers, etc. Note the bottom of all such facilities shall be above the MES.
- Flood proof design details/certifications of all sanitary and underground utilities.
- Floodproof design/structural details for any retaining walls and relocated/reconstructed fences.
- Denote the types of material to be applied to the exterior stairs and ramping. If wood or other similar product, the facilities shall be detailed and designed as floodproof with appropriate anchoring, etc.
- Written certification (signed and sealed) from a Connecticut Engineer/Architect confirming that the design is consistent with the provisions of Section 7.1 of the Stamford Zoning Regulations (“Flood Prone Area Regulations of the City of Stamford”) and is capable of withstanding the flood depths, pressures, velocities, impact and uplift forces and other factors associated with the base flood.

Residential Structure:

- Correct inaccuracies in the depiction (A-001) and description (A-301) of the flood hazard boundary and base flood elevation.
- All plans, sections and elevations shall show the appropriate base flood elevation (22.8 feet NGVD), minimum elevation standard (23.8 feet NGVD), and FIRM map references (090015-0007D, 11/17/93).
- Floodproof design of the proposed foundation system with appropriate interior/exterior elevations noted.
- Elevation and design of proposed elevator systems. Note that the bottom of the pit shall be elevated above the MES to gain the greatest flood insurance benefit.
- Pertinent elevation of all floors and utility spaces shall be noted in NGVD.
- Location/elevation of all exterior utility meters and junction boxes. Note the bottom of all such facilities shall be above the MES.
- Location/elevation of any exterior AC condensers, generators, ground level transformers, etc. Note the bottom of all such facilities shall be above the MES.
- Flood proof design details and certifications of all sanitary and underground utilities.
- Floodproof design/structural details for any retaining walls.
- Written certification (signed and sealed) from a Connecticut Engineer/Architect confirming that the design is consistent with the provisions of Section 7.1 of the Stamford Zoning Regulations (“Flood Prone Area Regulations of the City of Stamford”) and is capable of withstanding the flood depths, pressures, velocities, impact and uplift forces and other factors associated with the base flood.

Additional information was submitted to the EPB on July 7, 2009 and July 9, 2009. Copies of revised plans were transmitted to the Engineering Bureau for further review and comment (Talamelli to Gentile, 7/7/09).

SITE CHARACTERISTICS:

The subject property lies along the east side of Washington Boulevard, approximately 250 feet north of its intersection with Broad Street, and is described as Lots 7 and A, Card Numbers. E55, E56 and E57, List Numbers 002-6727, 002-6728 and 002-6729, Block 238, 2.71 Acres in records maintained by the Stamford Tax Assessor.

The property is currently developed, supporting a church, parish house, rectory, detached garage, paved parking, accessways, playground, fencing, and other related facilities. The property is characterized by its gently sloping urban lands, known floodplain areas, and a few small to moderately large sized trees (Norway Maple, Beech, Dogwood, Cherry, Chestnut, Mulberry, Pin Oak Birch), shrubs (Privet Hedge, Hydrangea, Rhododendron) and groundcovers/vines (Lawn Grass, Hosta, Poison Ivy, Wild Grape). Existing trees support diameters up to 36 inches (DBH).

There are no wetland soils on the property. The general soil manual entitled "Soil Survey of Fairfield County Connecticut," by the U.S. Department of Agriculture, Soil Conservation Service, 1981 describes the soils as "Urban Lands" (Ur). Urban Lands are those areas where urban structures such as roads, parking areas, and buildings cover more than 85 percent of the surface. Conditions are variable and necessitate on-site evaluation ("Soil Survey of Fairfield County, Connecticut," by the USDA, Soil Conservation Service, 1984, Pp. 32).

The site lies within a special flood hazard area (Zone AE, Flood Insurance Rate Map - 090015-0007D, November 17, 1993). During a 100-year storm (22.50 – 22.76 feet NGVD), flood waters would be expected to impact approximately forty percent (40% 47,608 square feet) of the property (west) with depths ranging from 0-1.76 feet. Although the street (2.4-2.5 feet in depth) and sidewalk (1.3-1.7 feet in depth) along Washington Boulevard (west) are expected to flood with low to moderately deep, slow moving floodwaters, **there is dry access to/from the property during the peak of the 100-year storm to the east at Franklin Street.**

The property lies within the non-drinking water supply watershed of the Rippowam River

ISSUES:

Impacts to the Existing Character of the Land:

In the southern reaches of the property, the applicant proposes to construct a multi-family residential building (94 – one and two bedroom residential dwelling units – Floor Area 109,110 S/F), asphalt surface parking, drainage, accessways, walkways, walls, landscaping, and other related improvements. The construction will necessitate the demolition of an existing rectory, a detached garage, and a surface parking area. In the northern reaches of the site, a new parish hall (3,597 S/F), parking, drainage, accessways, walkways, walls, and other features shall be constructed. Both new structures (the multi-family residential building and the parish hall) and many of the accompanying features shall be impacted by flood waters associated with the 100-year storm. The applicant reports that approximately 47,608 square feet of the designated flood hazard zone shall be impacted by the development (Application, Hennessey, 6/5/09).

Proposed grade changes are expected to be low, with cuts/fills and retaining structures not expected to exceed 2-2.5 feet. Given the scope of the development, much of the existing lawn/planting beds, most of the interior hedges,

and most of the site's larger trees (13 trees - up to 28" DBH) shall be lost. The total "green space" shall be reduced from approximately 47.6% of the site to 18.9%.

Impacts on Drainage:

The project engineer has submitted a drainage report to analyze the anticipated impact the development will have on drainage, infrastructure and adjoining properties ("Drainage Summary Report," D'Andrea, 5/29/09).

The engineer has noted that the project area (2.71 Acres) is currently divided into seven (7) subwatersheds as follows:

- Area 1 - comprised of 0.29 acres of paved surface parking - drains in an easterly direction towards the existing storm system in Franklin Street.
- Areas 2, 3, and 4 - comprised of 0.38, 0.19 and 0.89 acres of lawn, drive, the existing rectory, existing, garage and portions of the existing church - drain in a westerly direction towards the existing storm system in Washington Boulevard.
- Area 5 - comprised of 0.17 acres of lawn and portions of the existing church and parish house buildings - drains in a westerly direction towards the existing storm system in Washington Boulevard.
- Area 6 - comprised of 0.68 acres of asphalt parking, playground, and portions of the existing church and parish house buildings - drains in a westerly direction towards the existing storm system in Washington Boulevard.
- Area 7 - comprised of 0.11 acres of roof surface associated with the existing church and parish house buildings - drains in a southerly direction to an existing "subsurface retention facility."

Points of Concern ("POC") were established for each of the areas receiving site discharges, and the peak runoff flow rates were determined for the 1, 2, 5, 10 and 25-year storms. The total, peak flow at each "POC" (in cubic feet per second) is summarized as follows:

POC/Areas	Direction of Flow	Storm Event				
		1	2	5	10	25
"A" Area 1	East to Storm System in Franklin Street	0.48	0.59	0.77	0.90	1.03
"B" Areas 2-6	West to Storm System in Washington Boulevard	1.80	2.56	3.92	4.91	5.93
"C" Area 7	South to Existing On-Site Retention	0.14	0.18	0.25	0.30	0.35

The construction of a new residential building and parking in the southern portions of the property, and a new parish hall and parking in the northern portions of the site shall increase in the total area of imperviousness. If left unmitigated, it is expected that the total amount of stormwater runoff would increase as compared to existing conditions. Accordingly, the applicant has proposed to install new collection and subsurface detention systems to control the site's discharges. Soil testing was conducted in an effort to establish the feasibility of the proposed subsurface facilities ("Notes and Details, D'Andrea, 7/6/09).

Like in the existing condition, the property, post construction, shall be divided into seven (7) subwatersheds as follows:

- Area 1 - comprised of 0.02 acres of landscaped space east of the new residential building - shall drain overland in an easterly direction towards the existing storm system in Franklin Street.
- Areas 2, 3, 4 and 5 - comprised of 0.04, 0.03, 0.02 and 0.07 acres of landscaped space, enhanced sidewalks/street openings and other features situated between Washington Boulevard and both the new residential building and the proposed church/parish house/parish hall parking areas - shall drain in a westerly direction towards the existing storm system in Washington Boulevard.
- Area 6 - comprised of 1.27 acres of landscaped space, the playground, existing church, existing parish house and new parish hall and associated parking - shall be routed through a proposed subsurface detention system (48 Cultec 330 HD chambers) prior to discharge to the existing storm system in Washington Boulevard.
- Area 7 - comprised of 1.27 acres associated with the new residential building and parking - shall be routed through a proposed subsurface detention system (96 Cultec 330 HD chambers) prior to discharge to the existing storm system in Washington Boulevard.

The project engineer notes that successful construction of the proposed drainage systems will reduce storm water runoff flows to Franklin Street (east) for all the storm events. It will also reduce stormwater runoff rates to Washington Boulevard during both the 10 and 25-year storms. In the lesser storms (1, 2 and 5-year events), an increase in flow to the Washington Boulevard storm system is expected. However, the project engineer claims that given the size of the existing infrastructure, that the increases for these less intense storms are negligible and acceptable. In view of the above, the engineer has stated that there will be no adverse impacts to local drainage patterns or adjoining properties. Post construction impacts may be summarized as follows:

POC/Areas	Direction of Flow	Storm Event				
		1	2	5	10	25
"A" Area 1	East to Storm System in Franklin Street	0.01	0.01	0.02	0.03	0.04
"B" Areas 2-7	West to Storm System in Washington Boulevard	2.44	3.07	3.93	4.46	4.97

A comparison of the existing and proposed conditions may be summarized as follows:

POC/Areas	Direction of Flow	Storm Event				
		1	2	5	10	25
"A" Area 1	East to Storm System in Franklin Street	-0.47	-0.58	-0.75	-0.87	-0.99
"B" Areas 2-7	West to Storm System in Washington Boulevard	+0.64	+0.51	+0.01	-0.45	-0.96

Plans and reports were transmitted to the Engineering Bureau for review (Talamelli to Gentile, 6/9/09 and 7/7/09). The City Engineer has yet to confirm the design or the conclusions and methodology of the drainage report.

Impacts on Flood Heights:

The engineer has provided a hydraulic study to outline potential impacts on flood heights ("Hydraulic Summary Report," D'Andrea, 5/29/09). The engineer has concluded the project is situated within the river's ineffective flow area, and will therefore, not produce any increase in the water surface elevation during flood conditions. The

standard for floodplain rise in Stamford is 0.1 feet. In addition, the analysis showed that the floodwaters within this ineffective flow area will have velocities of approximately 0.0 feet/second.

Plans and reports were transmitted to the Engineering Bureau for review (Talamelli to Gentile, 6/9/09 and 7/7/09). Comments concerning the conclusions and study methodology outlined in the hydraulic report have not been received to date.

Impacts on Water Quality:

To assist in the attenuation of possible water quality impacts, the applicant has provided for the following:

- Submission of a sediment and erosion control plan consisting of silt fence along the site's perimeter, the application of anti-tracking materials to site accessways, designation of stockpile areas, addition of basin protection, street sweeping, installation of asphalt paving/curbs, and final soil stabilization measures ("Sediment and Erosion Control," and "Notes and Details," D'Andrea, 7/9/09).
- New catch basins/yard drains shall maintain minimum two (2) foot deep sumps and bell traps/elbows to assist in the collection of silt/debris prior to discharge ("Details" D'Andrea, 7/9/09).
- Most of the paved surfaces shall be directed through stormwater treatment systems (V2B1, Model 4, oil/grit separators) to assist in the collection of sands, silts, oils and other materials before discharging to the infiltrators and City drainage system ("Development Plan," and "Details" D'Andrea, 7/9/09).
- Storm water shall be further discharged to infiltrators – systems that take advantage of the soil's natural ability to cool, filter and otherwise treat runoff ("Development Plan," and "Details" D'Andrea, 7/9/09).
- Existing underground fuel storage tanks and transmission lines have already been removed from the property (Rengert/McAuliffe, Vertex Environmental, 1/11/06).
- New underground fuel storage shall be prohibited ("Storm Drainage and Utility," D'Andrea, 7/9/09).
- The new structures shall be served by natural gas ("Storm Drainage and Utility," D'Andrea, 7/9/09).

Structural Floodproofing:

The applicant notes that the buildings shall be floodproofed in accordance with Stamford's Flood Prone Area Regulations as follows:

Parish Hall or "Holly House"

- The lowest floor of the building (crawl space) has been set at an elevation of 23.8 feet NGVD which is one (1) foot above the limits of the base flood and at the minimum elevation standard ("Development Plan," D'Andrea, 7/9/09 and "Preliminary Section," Jennewein, 7/9/09).

- First floor of the building has been set at an elevation of 26 feet NGVD, which is 3.2 feet above the limits of the base flood and 2.2 feet above the minimum elevation standard (“Development Plan,” D’Andrea, 7/9/09 and “Preliminary Section,” Jennewein, 7/9/09).
- The reinforced concrete foundation walls and slab have been certified as floodproof per the regulations (“Preliminary Section,” Jennewein, 7/9/09).
- The bottom of all exterior utility meters and junction boxes shall be elevated above the minimum elevation standard of 23.8 feet NGVD (“Preliminary Elevations,” Jennewein, 7/9/09).
- Mechanicals, such as shall be situated above the level of the flood at the attic or roof levels (“Preliminary Section,” Jennewein, 7/9/09).
- The sanitary sewer and underground utilities support a floodproof design as certified by the engineer (“Details,” D’Andrea, 7/9/09).
- The architect has certified that the design complies with Section 7.1 of the Stamford Zoning Regulations (“Flood Prone Area Regulations”) and have been designed to withstand the flood depth, pressures, velocities, impact and uplift forces associated with the base flood (“Preliminary Section,” Jennewein, 7/9/09).

New Residential Complex

- The lowest floor of the building has been set at a minimum elevation of 25.8 feet NGVD which is 3.0 feet above the limits of the base flood and 2.0 feet above the minimum elevation standard (“First Floor Plan,” Chung, 7/9/09).
- Overall living space in the building has been set at a minimum elevation of 26.8 feet NGVD which is 4.0 feet above the limits of the base flood and 3.0 feet above the minimum elevation standard (“Development Plan,” D’Andrea, 7/9/09 and “First Floor Plan,” Chung, 7/9/09).
- Elevator pits shall extend to the base flood elevation of 22.8 feet NGVD. Enclosures shall be floodproofed with waterproof membranes to at least the minimum elevation standard (“Typical Elevator Details,” Chung, 7/9/09).
- The reinforced concrete foundation walls and slab have been certified as floodproof per the regulations (“Building Section,” Chung, 7/9/09).
- Electric, water, and elevator machine/metering rooms shall be situated at the first floor level at elevations ranging from 25.8-26.8 feet NGVD (“First Floor Plan,” Chung, 7/9/09).
- Condensers and other mechanicals shall be situated at the roof level (“Roof Plan,” Chung, 5/29/09).
- The sanitary sewer and underground utilities support a floodproof design as certified by the engineer (“Details,” D’Andrea, 7/9/09).

- The architect has certified that the design complies with Section 7.1 of the Stamford Zoning Regulations (“Flood Prone Area Regulations”) and have been designed to withstand the flood depth, pressures, velocities, impact and uplift forces associated with the base flood (“Building Section,” Cheung, 7/9/09).

Flood Preparedness:

- Two (2) separate flood preparedness plans have been provided (“Flood Preparedness Plan,” Parcel A, D’Andrea, 7/6/09 and “Flood Preparedness Plan,” 1231 Washington Boulevard, D’Andrea, 7/6/09). The plans have been tailored for the commercial uses proposed for the “Holly House” and residential uses proposed for the 94 unit residential structure. However, both plans describe the nature of flooding over and about the property, identify the floodproofing measures incorporated into the development, describe general flood preparedness measures, and outline possible vehicular and pedestrian evacuation routes/procedures. Copies of the plans shall be provided to all owners/tenants.
- The applicant intends to file an informative notice on the land records to advise residents/tenants of the flood hazard and disclose the existence of the flood preparedness plan provided (“Flood Preparedness Plan,” Parcel A, D’Andrea, 7/6/09 and “Flood Preparedness Plan,” 1231 Washington Boulevard, D’Andrea, 7/6/09).
- Evacuation signage shall be posted within the buildings at points of egress and along the chosen routes of evacuation (“Flood Preparedness Plan,” Parcel A, D’Andrea, 7/6/09, “Flood Preparedness Plan,” 1231 Washington Boulevard, D’Andrea, 7/6/09, First Floor Plan,” Cheung, 7/9/09 and “Preliminary Section,” Jennewein, 7/9/09). **It noted that dry access has been provided to both properties by either a formal drive (Residential Complex) or enhanced walkway/accessory (Parish House) east to Franklin Street.** Owners/occupants of both buildings shall be able to move to high ground by traveling north on Franklin Street (left), then east (right) on North Street.
- Flood hazard warning signage shall be posted at point of egress at Washington Boulevard (“Development Plan,” D’Andrea, 7/9/09).

Mitigation:

To protect tree resources and enhance both the streetscape and the overall aesthetics of the property, the applicant has provided for the following:

- Provision of a preliminary landscape plan for the property (“Site Plan: Planting and Materials,” 7/7/09). The plan consists of numerous trees (“October Glory” Red Maple – 12, Sugar Maple – 3, Trident Maple – 4, Shadblow – 5, Heritage River Birch – 5, Flowering Dogwood – 18, Kousa Dogwood – 5, Serbian Spruce – 3, Kwanzan Cherry – 6 and Accolade Elm – 17), shrubs (Common Boxwood – 51, Meserve Holly – 75, Chinodes Rhododendron – 22, Flowering Spirea – 100 and Korenspice Viburnum – 46), groundcovers (Liriope – 675, Pachysandra – 210) and vines (Climbing Hydrangea – 40). Several of the plantings selected by the applicant have conservation value.
- Streetscape enhancements, including granite curbing, brick pavers and scored concrete (accompanied by grated tree openings and lighting) have been added along Washington Boulevard (“Site Plan: Planting and Materials,” Stout, 7/7/09). The scheme is one of the City accepted standards.

- Tree protection in the form of snow fence/chain link fence situated along the “driplines” of those existing trees expected to be incorporated into the post construction landscape (“Sediment and Erosion Control,” and “Notes and Details,” D’Andrea, 7/9/09).
- The most significant tree on site is a 36” Pin Oak situated to the south of the proposed Parish Hall. The tree was evaluated by a Connecticut Licensed Arborist, and recommendations have been made to ensure that the specimen remains alive and in good condition during and post construction (Parrott, 7/2/09). Recommendations include the addition of chain link fence within 15’ of the tree, addition of a shallow layer of wood chips along the base of the tree, pruning to remove deadwood and raise the canopy to allow for equipment access, limiting nearby trenching, deep root fertilization and arborist’s supervision of any root cuts to limit damages. All the recommended actions have been added to the plans (“Sediment and Erosion Control,” D’Andrea, 7/9/09).

Alternatives:

The applicant has stated that it has explored alternative grading/design layouts to reduce overall site imperviousness and preserve resources of value, and that the resultant plan is the best design to do so (Hennessey, 7/7/09). The applicant notes that the current site plan is based upon a proposed text amendment/special exception with the Zoning Board to reduce overall parking requirements – diminishing the per unit number of spaces for two (2) bedroom residential units, and by implementing a shared parking agreement between the church and existing nursery school.

DISCUSSION/OPTIONS:

Impacts associated with this project may include:

- General resource loss due to poor planning or construction practice;
- Elevated flood heights caused by additional floodplain encroachment;
- Drainage impacts caused by altered flow patterns or substantial increases in site imperviousness;
- Water quality impacts caused by increased imperviousness, intensification of use, and/or the release of oils, chemicals, sediment during and post construction; and
- Creation of conditions that may compromise the integrity of the structures or increase hazards to persons or property.

The applicant has sought to address these concerns by confirming the absence of hydraulic impact, adding structured systems to mitigate drainage impacts, providing erosion controls, committing to the use of pollution controls, providing drawings to confirm that the construction can be appropriately floodproofed, enacting flood preparedness plans/procedures, preserving a specimen tree, and providing a landscape plan to mitigate for the anticipated tree loss, enhance the streetscape, and improve the site aesthetics/conservation values.

The applicant claims that the submitted development scheme, which will require a text amendment/special exception to reduce current parking requirements, already reduces resource and “green space” impacts. Certainly, alternative building designs and layouts are available to further reduce resource impacts/site imperviousness. The Board should determine if the applicant’s actions to date satisfy its resource protection, water quality, and other site planning objectives. Note that as the project moves through the Zoning process, additional opportunities to

increase the total area not committed to buildings, parking or sidewalk may arise. For example, modifications to the proposed streetscape amenity zone may allow for additional “green” and plantable space, particularly along Washington Boulevard.

Pending the receipt of positive comments from Engineering and if the Board finds that the development will not result in a significant environmental impact, impacts on adjoining properties or irreversible commitment important resources, that no reasonable alternatives for development exist, that appropriate mitigation has been provided, and that the project is consistent with the structural and preparedness standards outlined in the "Flood Prone Area Regulations of the City of Stamford," the Board may act to **APPROVE** EPB Permit Application No. 2912 with the following conditions:

1) Work shall comply with the following:

- “Site Plan: Planting and Materials,” “Site Plan: Lighting,” “City of Stamford Streetscape Details,” and “Planting and Site Details,” St Andrews Episcopal Church, 1231 Washington Boulevard, Stamford, Connecticut, Sheets SP-1.0, SP-2.0, SP-3.0 and SP-3.1, by Wesley Stout Associates, LLC, dated July 7, 2009.
- “Existing Conditions Survey,” St. Andrews Episcopal Church, 1231 Washington Boulevard, Stamford, Connecticut, Sheets C-1.0, by Rocco V. D’Andrea, Inc., dated July 6, 2009.
- “Zoning Location Survey,” “Development Plan,” “Storm Drainage and Utility Plan,” “Sight Distance Plan,” “Sedimentation and Erosion Control Plan,” “Notes and Details,” and “Details,” St. Andrews Episcopal Church, 1231 Washington Boulevard, Stamford, Connecticut, Sheets C-2.0, C-3.0, C-4.0, C-5.0, C-6.0, C-7.0 and C-7.1, by Rocco V. D’Andrea, Inc., dated July 9, 2009.
- “Holly House Preliminary Plan” “Holly House Preliminary Elevations,” “Holly House Preliminary Elevations,” “and “Holly House Preliminary Sections,” St. Andrew’s Episcopal Church, 1231 Washington Boulevard, Stamford, Connecticut, Sheets SA-1, SA-2, SA-3, and SA-4, by Jennewein Architects and Planners, Inc., dated July 9, 2009.
- “Architectural Site Plan,” “First Floor Plan,” “Front Elevation,” “Side Elevation 1,” “Side Elevation 2,” “End Elevations,” “Building Section,” and “Typical Elevator Details,” St. Andrew’s Episcopal Church, 1231 Washington Boulevard, Stamford, Connecticut, Sheets A-001, A-101, A-201, A-202, A-203, A-204, A-301, and A-302, by Do H. Chung and Partners, dated July 9, 2009.
- “Second Floor Plan,” “Typical Floor Plan,” “Roof Plan,” and “Building Materials,” St. Andrew’s Episcopal Church, 1231 Washington Boulevard, Stamford, Connecticut, Sheets A-102, A-103, A-104, and A-205, by Do H. Chung and Partners, dated May 29, 2009.

- “Drainage Summary Report,” St. Andrew’s Episcopal Church, Located at 1231 Washington Boulevard, Stamford, Connecticut, Prepared for St Andrew’s Episcopal Church, , by Rocco V. D’Andrea, Inc., dated May 29, 2009.
 - “Hydraulic Summary Report,” St. Andrew Episcopal Church, Located at 1231 Washington Boulevard, Stamford, Connecticut, Prepared for St. Andrew’s Episcopal Church, by Rocco V. D’Andrea, Inc., dated May 29, 2009.
 - “Flood Preparedness Plan,” Prepared for Occupants of 1231 Washington Boulevard, St. Andrews Episcopal Church, Holly House, Stamford, Connecticut, by Rocco V. D’Andrea, Inc., dated July 6, 2009 (Draft).
 - “Flood Preparedness Plan,” Prepared for Residents of Parcel “A”, Washington Boulevard and Franklin Street, Stamford, Connecticut, by Rocco V. D’Andrea, Inc., dated July 6, 2009 (Draft).
 - “Correspondence from Renee Kahn, Director, Historic Neighborhood Preservation Program, Inc, dated June 30, 2009.
 - Correspondence from Derek Daunais, P.E., Rocco V. D’Andrea, Inc., dated July 7, 2009 and July 9, 2009.
 - Correspondence from William J. Hennessey, Jr., Esq., Sandak Hennessey and Greco, dated July 7, 2009.
 - Correspondence from Donald T. Parrott, Arborist, Connecticut Arborists, Inc., dated July 2, 2009.
 - “UST Removal Closure Report,” Prepared for TAG Washington Boulevard, LLC, by Vertex Environmental Services, Inc., dated January 11, 2006.
 - “Sidewalk Connection at UCONN, St. Andrews Episcopal Church, 1231 Washington Boulevard, Stamford, Connecticut by Wesley Stout Associates, dated June 26, 2006.
 - Correspondence from Frank Baker, Esq., Robinson and Cole, LLP, dated July 1, 2009.
 - Correspondence from Annie Huang, Do Chung and Partners, dated July 9, 2009.
- 2) Submission of a permit filing fee in the estimated amount of Fifty-eight and 00/100 Dollars (\$58.00) within fifteen (15) days of the decision’s publication (on or about August 5, 2009).
- 3) "Permit Compliance Fee" in the amount of Five Thousand Four Hundred Fifteen and 00/100 Dollars (\$5,415.00) shall be filed with the Environmental Protection Board. The initial fee shall be submitted to the EPB prior to the start of any site activity and issuance of a building permit.

Subsequent fees shall be submitted on an annual basis on or before the anniversary of the permit's effective date until the project is satisfactorily completed. Said fee is required pursuant to Section 5.10b of the "Inland Wetland and Watercourse Regulations."

- 4) Submission of a performance bond, certified check or other approved surety to secure the timely and proper performance of: a) temporary and permanent sediment and erosion controls, b) tree protection measures, c) drainage structures, d) landscaping/mitigation, e) professional supervision of engineered elements, floodproofing and landscaping, f) as-built plans and certifications, and g) 15% contingency of the total. A detailed estimate of these costs must be supplied to EPB Staff for approval prior to the submission of the performance surety. The performance surety shall be submitted to EPB Staff prior to the start of any site activity and issuance of a building permit. Note that the EPB's surety requirement may be combined with any surety required by the Stamford Zoning Board.
- 5) Submission of a completed "Contractor's Compliance Statement" prior to the start of any site activity and issuance of a building permit.
- 6) Final architectural, engineering, landscaping and flood preparedness plans shall be subject to the review and approval of EPB Staff prior to the start of any site activity and issuance of a building permit. Note that special attention to the design of elevator systems in the residential structure may be required to maximize the flood insurance benefit. Flood preparedness revisions may be required to address recent modifications to building elevations.
- 7) A Connecticut licensed surveyor, prior to the start of any site activity, shall rough stake the proposed work areas in the field.
- 8) Sediment and erosion controls and tree protection measures shall be installed/applied in the manner and location shown on the permit plans/reports. A statement confirming the full and proper completion of the required erosion and tree protection measures shall be provided to EPB Staff prior to the start of any site activity and issuance of a building permit.
- 9) Prohibition of in-ground storage tanks considering the known flood hazards and the site's proximity to the Rippowam River.
- 10) All disturbed areas shall be stabilized in accordance with the permit plans prior to the receipt of certificates of occupancy and release of the performance surety.
- 11) All engineered elements, including drainage, utilities, grading, walls, walkways, final stabilization measures, etc., shall be completed under the supervision of a Connecticut registered professional engineer and licensed land surveyor with written certifications (signed/sealed correspondence by the engineer) and an improvement location survey (signed/sealed by the surveyor) submitted prior to EPB authorization for certificates of occupancy and a return of the required performance surety.
- 12) All floodproofing shall be completed under the supervision of a Connecticut registered professional engineer/architect. Upon the completion of the construction, and prior to EPB authorization for certificates of occupancy and return of the required performance surety, a Connecticut registered professional engineer/architect shall certify (signed and sealed correspondence) that the proposed

development has been constructed in accordance with Section 7.1 of the Stamford Zoning Regulations (“Flood Prone Area Regulations of the City of Stamford”) and is capable of withstanding the flood depths, pressures, velocities, impact and uplift forces and other factors associated with the base flood. Specific reference to the proposed floodproofing measures shall be made.

- 13) Prior to the issuance of a final certificate of occupancy and return of surety, the supervising landscaping professional and arborist shall certify (signed and on letterhead), that all approved landscaping and tree mitigation measures have been completed in accordance with the approved design plan/permit.
- 14) Upon the completion of the construction and prior to the issuance of a certificate of occupancy and return of surety, a Connecticut registered professional surveyor shall:
 - Submit an improvement location survey (“as-built plan”) certifying the location and final elevation of: a) primary floor levels, b) crawl space floor levels, c) utilities and services facilities, d) base of any elevator pits, and e) other features as determined by EPB Staff, etc.
 - Submit a complete, standard National Flood Insurance Program Elevation Certificate/Floodproofing Certificate.
- 15) Per the direction of EPB Staff, posting of standard flood evacuation signage at all primary points of egress from the buildings and along chosen pedestrian/vehicular evacuation routes prior the issuance of final certificates of occupancy and return of surety. Signage discouraging the use of flood prone areas along Washington Boulevard shall also be added.
- 16) Prior to the start of any site activity and issuance of building permit, execute and file a standard notice on the Stamford Land Records disclosing the following information.
 - The subject property lies, within a known flood hazard area described as Zone AE, with a projected base flood elevation of 22.5-22.76 feet NGVD as depicted on Flood Insurance Rate Map 090015-0007D, dated November 17, 1993.
 - A permit (1231 Washington Boulevard, Lots A and 7, Parish of Saint Andrews Protestant Episcopal Church and RMS Washington Boulevard, LLC, EPB #2912, 7/09) was issued by the Environmental Protection Board of the City of Stamford to allow construction of a multi-family residential building (94 residential units), parish hall, parking, drainage, landscaping, and other related improvements within the base floodplain of the Rippowam River.
 - References to the required flood preparedness plans and provide for the distribution to occupants/tenants upon occupancy.
 - Standard enforcement provisions.

- 17) A standard drainage facilities maintenance agreement shall be executed and filed on the Stamford Land records to ensure the full and proper care/repair of all drainage facilities prior to the start of site activity and issuance of building permit.
- 18) A standard landscape maintenance agreement shall be executed and filed on the Stamford Land Records to ensure the full and proper maintenance of all final landscaping features, prior to the start of site activity and issuance of building permit.

Richard H. Talamelli
Environmental Planner