

Leonard Jackson Associates

**Patrick Farm SUBDIVISION
Application for Preliminary Plat Approval**

**Reponses to Comments from October 25, 2010 Public Hearing
November 22, 2010**

**Responses have been prepared by the offices of:
Terry Rice, Esq.
Tim Miller Associates
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The format of this document is:

- Part I: Summary Table of Outstanding Items from October 25, 2010 Public Hearing.
- Part II: Back-Up Information Supporting Items Discussed in Part I.

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Part I: Summary Table of Outstanding Items from October 25, 2010 Public Hearing

	Outstanding Item	Response Summary
1	Report: The Concerns with the Design of the Patrick Farm Development Submitted to the Town of Ramapo Planning Board, October 25, 2010.	<p>The Report challenged three aspects of the completed Environmental Review:</p> <ul style="list-style-type: none"> • Potential water supply impacts • The timber rattlesnake assessment and • The box turtle assessment. <p><u>Potential water supply impacts:</u> Potential impacts are not significant and will be discussed in further detail in a forthcoming document to be submitted under separate cover. In addition, a detailed discussion of this topic will be presented to the Planning Board on November 29, 2010.</p> <p><u>Timber rattlesnake assessment:</u> The assessment was performed by Jason Tesaro Consulting, LLC and he stands by the conclusions of his investigation. Attachment "A" in Part 2 of this document is a November 11, 2010 report by Jason Tesaro Consulting which defends his assessment and his qualifications.</p> <p><u>Box turtle assessment:</u> The box turtle assessment was performed by both Carpenter Environmental Associates and Tim Miller Associates. Attachment "B" in Part 2 of this document is a November 16, 2010 report by Tim Miller Associates which provides a <u>complete</u> review of the assessment as provided as part of the finished Environmental Review. The information previously provided stands.</p>
2	Columbia Gas Comments	Review comments were requested by CDRC. Attachment "C" in Part 2 of this document is an October 28, 2010 letter from Columbia Gas. Columbia's comments are relatively minor in nature. Many of the comments include the following statements: "No engineering impacts are noted,..." or "...is not objectionable to Columbia". The Applicant will comply with all of Columbia's comments.
3	NYSDOT	The Planning Board has inquired into the ongoing NYSDOT review. A coordination meeting was held with the DOT on November 10, 2010. The meeting outlined the framework for compliance with the October 15, 2010 DOT review comments. The Applicant will comply with all of the DOT's comments.
4	Palisades Interstate Park Commission	A coordination meeting was held with the PIPC on November 16, 2010 which resulted in a November 17, 2010 resubmission which is included as Attachment "D" in Part 2 of this document. We anticipate a

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		positive response from the PIPC and will provide the Planning Board with any forthcoming correspondence we receive from the PIPC.
5	Workforce and Volunteer Housing Agreement	This document incorporates the criteria, pertaining to Workforce and Community Service Worker housing, set forth in our Response 11 from our October 6, 2010 submission, into a formalized agreement ready for execution by the Town of Ramapo. This document is included as Attachment "E" in Part 2 of this document.
6	Public comment made at the October 25, 2010 public hearing regarding Impact on the East Ramapo School District	The East Ramapo School district has been experiencing declining enrollments for several years. The influx of additional students projected to live at Patrick Farm would be a beneficial impact. As described in Attachment "F", a total of 609 students are expected to live at Patrick Farm, of which 201 students are projected to attend the East Ramapo Central Schools. The total cost to educated the public and private school students is estimated to be \$2,621,574, whereas the total school taxes projected from development of the project site are projected to be 3,215,732, thus the district is expected to realize a net benefit, after covering costs, of more than \$750,000 annually. Please refer to Attachment "F" for a more detailed description of this analysis.
7	Scenic Roads District	Response 8 and Appendix A from the October 6, 2010 Planning Board Submission provided the Planning Board with a thorough review of how the development complies with the intent and the requirements of Chapter 215 of the Town Code. In addition, the Applicant has further enhanced development plans to identify how rock walls will be rebuilt along Route 202 and how a new rock wall will be built along the frontage of the Volunteer Housing Site. The Volunteer Housing wall will require archeological oversight and can only be constructed if no significant artifacts are unearthed. Attachment "G" provides sketches of the proposed walls that have been added.

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Part II: Back-Up Information Supporting Items Discussed in Part I.

Attachments

- A. November 11, 2010 report by Jason Tesauro Consulting.
- B. November 16, 2010 report by Tim Miller Associates.
- C. October 28, 2010 letter from Columbia Gas.
- D. November 17, 2010 resubmission to the Palisades Interstate Park Commission.
- E. November 22, 2010 Workforce and Volunteer Housing Agreement.
- F. September 27, 2010 Excerpts from DEIS Comm. Services and Fiscal Analysis (Impact on the East Ramapo School District)
- G. Proposed Stone Walls at Scenic Road District

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November 11, 2010

Ann Cutignola
AICP Senior Planner
Tim Miller Associates
10 North Street
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RE: Timber rattlesnakes and the Patrick Farm subdivision

Dear Ann:

In response to Geoff Welch's comments within the report, *The Concerns with the Design of the Patrick Farm Development Submitted to the Town of Ramapo Planning Board, October 25, 2010*, directed at the state-threatened timber rattlesnake habitat assessment I conducted on the Patrick Farm site in August of 2008, I offer the following:

The purpose of the timber rattlesnake habitat investigation at Patrick Farm (see: *Timber Rattlesnake Habitat Assessment for the Proposed Patrick Farm Land Development, Ramapo, New York by Jason Tesauro, August 11, 2008*) was to determine the potential for timber rattlesnake occurrence based on the presence of suitable ecological conditions that would be conducive to the spectrum of timber rattlesnake life histories and behaviors, with an emphasis on critical denning and associated post-emergence basking habitat. As stated in my initial report, which is included as Appendix G of the DEIS: "Through an analysis of the surrounding landscape, it is likely that the nearest timber rattlesnake denning habitat is in the Ramapo Mountains, west of the project site. Timber rattlesnakes are known to disperse up to 2.5 miles from their dens (New York Natural Heritage Program). While the Patrick Farm project is within this dispersal distance, the forest community is marginal in habitat quality and furthermore, it is isolated from the Ramapo Mountains by (U.S. Route) 202. Timber rattlesnakes are unlikely to occur on the project site." I stand by the conclusions of my investigation and have provided the following discussion to support them.

I would first like to provide some additional ecological background on timber rattlesnakes that will prove cogent to the discussion of timber rattlesnakes and Patrick Farm. In much of the Northeast, timber rattlesnakes exhibit a strong fidelity to specific denning sites, which are typically deep, moist, protected crevices in bedrock, talus or rock slides that maintain temperatures above freezing and are often in a south-facing geographic orientation (Brown, 1993; Martin, 1989; Wright and Wright, 1957; New York Natural Heritage Program). In the restricted range that the timber rattlesnake currently occupies (i.e., as a result of habitat loss and human persecution), suitable denning habitat is limited, and thus its availability and location present a strong governing force over the distribution and home ranges of timber rattlesnakes. In the spring and summer, timber rattlesnakes will disperse from their dens into a variety of terrestrial habitats (e.g., forests, thickets, wetlands, meadows) for foraging, breeding and other life histories and return to the same den usually by the onset of fall in this region (Hammerson and Lemieux, 2001). This cycle repeats each year of a snake's life; and while home ranges may shift seasonally based on environmental changes, distribution of resources, intraspecific competition, or changes in hormonal/reproductive cycles, there is very little data demonstrating deviation from denning areas

(Brown, 1993). The New York State Department of Environmental Conservation characterizes seasonal timber rattlesnake movement as generally within 1.3 to 2.5 miles from their den, with a maximum seasonal dispersal movement observed of 4.5 miles. State regulatory land-use restrictions for activities within proximity to dens are typically determined on a site-by-site basis and may require seasonal timing restrictions, on-site biological monitoring, and the installation of temporary barriers to prevent snakes from entering work areas.

During my 2008 survey of Patrick Farm I was unable to identify habitat that exhibited characteristics of documented timber rattlesnake denning habitat (i.e., talus, bedrock fractures, ledge crevices, boulder fields) reported in the literature (Brown, 1993; Martin, 1989; Wright and Wright, 1957; New York Natural Heritage Program; Schantz, pers. comm.) or that I have personally observed in the region. The nearest suitable (and documented) denning habitat occurs in the Ramapo Mountains which are located approximately 500 m west of Patrick Farm within the boundaries of Harriman State Park and other protected lands. In this region, post-emergence basking and gestation habitat typically are spatially proximate to denning area/ridge complex (Brown, 1992; Schantz, pers. comm.) and were not present on Patrick Farm.

As quoted in Mr. Welch's comments, Mr. Stechert identified the fields on Patrick Farm as potential foraging habitat for timber rattlesnakes, based on the assumption that they would support an abundance of prey (i.e., meadow voles). While I agree that grassy fields can provide good foraging habitat for timber rattlesnakes, the same unsubstantiated logic can also be used to suggest that the oaks and other mast and seed-producing trees within the wooded portions of Patrick Farm support the eastern chipmunk (*Tamias striatus*) and eastern gray squirrel (*Sciurus carolinensis*), which are common timber rattlesnake prey species. Given the species' catholic diet of small mammals (Clark, 2002), it is conceivable that that the majority of Patrick Farm (minus the buildings and developed areas) supports an ecological community that could support a rich prey base and thus provide foraging habitat for timber rattlesnakes. As opposed to timber rattlesnake basking, gestating or denning habitat, foraging habitat covers a broad range of ecological communities and is very difficult to identify with any certainty without actual timber rattlesnake observations and/or radio-telemetry data. Only rigorous, multi-year studies could definitively prove/disprove if the fields and woods at Patrick Farm are being utilized by foraging timber rattlesnakes.

In the absence of empirical timber rattlesnake data for Patrick Farm, it is not imprudent to assert one's expert opinion on the likelihood of timber rattlesnake presence based upon the most current and empirical information on rattlesnake biology and conservation, particularly the impact that roads have on the species. Road mortality has been cited as a major conservation threat to timber rattlesnakes (Brown et al., 2010; Rudolf et al., 1998; Tynning, 1992; New York Natural Heritage Program). Rudolf et al. (1998) demonstrated that the current distribution of timber rattlesnakes in eastern Texas was heavily influenced by road density and concluded that remaining viable populations were restricted to areas with the lowest road density. In cases where roads have fragmented summer habitat from dens, timber rattlesnakes have demonstrated lower genetic diversity (i.e., from the loss of genotypes to road mortality) than snakes in contiguous areas of habitat (Clark et al., 2010). In light of these data, the statement in my report about U.S. Route 202 "isolating" Patrick Farm from the core timber rattlesnake habitat in the neighboring Ramapo Mountains is not an inconceivable assertion, contrary to what Mr. Welch seems to believe. U.S. Route 202 runs adjacent to approximately 1,400 meters of the Patrick Farm parcel and separates Patrick Farm from Harriman State Park (which contains the Ramapo Mountains) to the north, west and southwest. In the absence of the highway, a legitimate argument could be made for the importance of maintaining the forests and fields at Patrick Farm to provide summer habitat for timber rattlesnakes, as it occurs well within seasonal dispersal distance for the species. U.S. Route 202 is nevertheless a reality, and its high volume of vehicular traffic presents a formidable mortality hazard and thus a barrier to seasonal timber rattlesnake movement both to and from Patrick Farm.

Mr. Welch suggests that timber rattlesnakes can use culverts to gain safe passage under the highway. Culvert use by timber rattlesnakes is poorly documented in the literature with the exception of a study in the New Jersey Pinelands where radio-tracked timber rattlesnakes were found making use of experimental culverts that were specifically designed to accommodate timber rattlesnakes and were

equipped with a lateral drift fence system that served to guide traveling timber rattlesnakes into the culvert (Laidig and Golden, 2004). I observed two stream culverts associated with the 1,400 meter stretch of U.S. Route 202 bordering Patrick Farm that appeared potentially passable to timber rattlesnakes. While these stream culverts could perhaps provide an alternative route for timber rattlesnakes traveling to and from Patrick Farm along the northern end of the property, they cover only a small area of the property's expansive highway frontage and are therefore unlikely to mitigate the overall mortality risk associated with the crossing of U.S. Route 202.

The lack of suitable denning habitat on Patrick Farm, the mortality hazard presented by U.S. Route 202, the density of residential subdivisions and lack of suitable habitat surrounding Patrick Farm (east of Rt. 202) collectively present strong limitations on the habitat suitability of Patrick Farm for the timber rattlesnake. Fortunately for the species, Harriman State Park and other protected public lands to the north, south and west of Patrick Farm encompassing the Ramapo Mountains contain > 45,000 contiguous acres of forests, ridge, shrublands and wetlands that provide critical—and hopefully permanently protected—habitat that, with the proper management, is conducive to supporting a viable timber rattlesnake population long into the future.

Controversial development projects like the Patrick Farm subdivision often generate two camps with polarizing viewpoints—the pro-development and the anti-development—that each use (and often misuse) science to justify their positions and gain political support for/against the project. The conclusions that I present in this investigation have been made with the utmost scientific objectivity with no allegiance to any party, particular stakeholders involved in the Patrick Farm subdivision proposal or personal ideology.

Lastly, I wish to address my qualifications for conducting timber rattlesnake habitat assessments. A passionate amateur naturalist and herpetologist as a child, I landed my first professional wildlife biologist position the New Jersey Division of Fish and Wildlife's Endangered and Nongame Species Program in 1995 (age 21). During my 9-year employment with the Endangered and Nongame Species Program where I achieved the position of Senior Zoologist, my work focused on the conservation, research and management of endangered/threatened reptiles and amphibians and included supervising and coordinating large, statewide multi-species efforts such as the Herptile Atlas and Vernal Pool projects. In 2002, I received a Master's Degree in Ecology from Rutgers University with a focus on reptiles and wetland ecology. In 2004, I started my own ecological consulting firm specializing in reptiles and amphibians and rare wildlife of the Northeast. Eighty percent of my consulting work to date has been with federal government (U.S. Fish and Wildlife Service and National Park Service) and the non-profit organizations, Environmental Defense Fund and Hudsonia, Ltd. My experience with timber rattlesnakes dates back early in my employment with the New Jersey Endangered and Nongame Species Program where I assisted Principal Zoologist and leader of the Program's rattlesnake project, Michael Valent, with den surveys in the Kittatinny Mountains of northwestern New Jersey. While the focus of much of my fieldwork included turtles and other amphibians, over the course of my 9-year employment I assisted rattlesnake project biologists with surveys and radio-telemetry along the Appalachians (Kittatinny Mountains) and into the Highlands (Bearfort, Wawayanda, Green Pond, and Ramapo mountains) on many occasions. On my own time, I have spent hundreds of hours over the past 15 years exploring timber rattlesnake habitats and observing/photographing rattlesnakes throughout New Jersey, southern New York, and throughout the Southeastern U.S. As an ecological consultant, I have conducted five timber rattlesnake habitat assessments in southeastern New York (Shawangunk Mountains, Schunemunk Mountain, Catskill Mountains), performed one timber rattlesnake presence/absence survey in the Shawangunk Mountains and assisted another ecological consulting firm with a habitat assessment/survey in the Catskill Mountains. The reports generated by each of these surveys have been reviewed by NYSDEC Region 3 Staff and have not been challenged. It is stated in NYSDEC's '*Guidelines to Reviewing Projects for Potential Impacts to Timber Rattlesnakes*' that timber rattlesnake habitat assessments are conducted by 'individuals that have knowledge of timber rattlesnake ecology,' and I feel that my experience more than satisfies this requirement.

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Memorandum:

To: Ann Cutignola, AICP
From: Steve Marino, PWS
Date: 11/16/10
Subject: Patrick Farm - Box Turtles

As we have discussed, we reviewed the comments from Geoff Walsh, dated October 25, 2010, submitted to the Ramapo Planning Board, relating to water supply and ecological concerns for the Patrick Farm development. We specifically considered the potential impacts to box turtles under his heading of "Biodiversity".

As noted in Mr. Welsh's comments, the DEIS and FEIS acknowledge the presence of at least one box turtle on the Patrick Farms site. As noted in the FEIS, and quoted in Mr. Welsh's comment on "biodiversity", there is a likelihood that habitat loss and proximity to human activity could impact the box turtle population on the site. The size and importance of that population is in question, since only two turtle sightings occurred during many site visits by both Carpenter Environmental Associates and Tim Miller Associates. Both of these turtle sightings occurred in the same location (near the power line easement in the eastern part of the property, near Wetlands 3 and 3A), so there is a possibility that this was the same turtle observed twice.

The potential impacts to box turtles were enumerated very clearly in the DEIS and FEIS. The loss of forest, introduction of a human population (and their pets), and increased vehicle traffic through the property could potentially affect the ability of any turtles which may exist, to move throughout the site. These potential impacts to box turtles were disclosed in the SEQRA process and identified in the Findings. As noted in DEC's comment for the FEIS,

"As the DEIS indicates, NYS State Law does not offer any specific protection for species of special concern. However, the final scoping document requires that the DEIS evaluate the potential impacts on unique, rare and/or endangered, threatened and special concern species." (Adam Peterson, DEC, Comment 3.3-10)

These impacts were clearly spelled out in the FEIS in response to this comment, as noted in Mr. Welsh's letter. However, Mr. Walsh omitted the part of that response which deals with mitigation measures, which reads as follows:

"To mitigate the potential impacts to box turtles on the project site, areas of wetland and wetland buffer would remain as available habitat to box turtles after development of the project site. In addition to the undisturbed wetland areas, individual residential lots, specifically the single family residences, are expected to retain portions of undisturbed

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habitat after development of homes that would continue to provide habitat to eastern box turtles, although this may increase impacts related to human-turtle interaction and illegal collection as pets. The addition of stormwater management areas would also provide suitable habitat for box turtles after development of the project. To mitigate impacts related to road-trapped turtles, the applicant may consider the use of Cape-Cod style curbing along roads within the development.

“During construction, filter fabric fencing along the limits of disturbance will be used to keep turtles out of the work area to the extent possible. The construction manager and construction staff will be instructed by the environmental site manager to be observant for turtles. The fence line will be checked each morning by the work crew prior to commencement of earth work; this has worked well on past projects, and also allows for an ongoing tally of turtles and snakes. Crews will report any findings to the site environmental monitor on a regular basis. Any turtles that make it through or around the fence over night will be placed back outside of the fence by construction workers.” (Patrick Farm FEIS, P. 3.3-4, Response 3.3-10)

The turtle sightings, which occurred on the site, were located in the area of the power line/gas line easement, which is part of a corridor that connects Wetland 1 to Wetlands 3 and 3A via a stream channel, which continues to the north and under Route 202. The power line itself is a corridor that will be maintained in an east to west orientation, providing undisturbed access to the larger tributary further to the east. It is also noted in the FEIS that this part of the site will be developed with larger lots (one acre or greater), so that treed areas are likely to remain for cover. Most importantly, the 12+ acre Wetland 1 and a minimum of 100 feet of adjacent area will be preserved, so that if any turtles exist which may require relocation, they can utilize the wetland and its adjacent area for foraging and other habitat. Other measures, including permanent fencing along the wetland corridors, over-sizing of culverts to allow free passage and use of Cape Cod curbing could also be implemented to ensure that corridors remain available.



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October 28, 2010

Dennis Rocks P. E., CFM
Leonard Jackson Associates
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Pomona, NY 10970

Re: Patrick Farms Project, LJA #09051

Dear Dennis:

Columbia Gas Transmission personnel have reviewed the plans you submitted for this project for impacts on our facilities. For your convenience, we listed our comments on a lot-by-lot basis. Although the report is lengthy, a number of objections can be remedied in the same way for all lots.

Project Number and Description:

The property owner (developer) proposes to sub-divide property and construct three separate projects (Patrick Farms Subdivision, Patrick Farms Volunteer Housing and Patrick Farms Condominiums). Each of the three developments has been submitted for review. Two of the proposed developments, the Patrick Farms Subdivision and the Patrick Farms Condominiums will impact Columbia Gas Transmission's (Columbia) high-pressure natural gas pipeline Line 10338.

Patrick Farms Volunteer Housing

Drawings (Project #09051, Issue 1, Dated 6/2/10 & Rev. Issue 2, Dated 8/12/10) were received and reviewed for engineering impacts.

Engineering Impacts:

No impacts to Columbia Gas Transmission's high pressure natural gas pipeline facilities are illustrated on the supplied drawings for the Patrick Farms Volunteer Housing development. All work involved with this development (Patrick Farms Volunteer Housing) lies outside of Columbia Gas Transmission's pipeline right of way.

Patrick Farms Condominiums

Drawings (Project #09051, Issue 1, Dated 6/2/10 & Rev. Issue 2, Dated 8/12/10) were received and reviewed for engineering impacts. Impacts are listed below along with concerns or objections/no objections from Columbia.

Engineering Impacts:

- WQ Basin #4 lies along the pipeline right of edge and is not objectionable to Columbia; however construction equipment is expected to be operating within the confines of Columbia's right of way. Columbia must review and approve all equipment proposed to operate within its right of way.
- The Maintenance Access Drive servicing WQ Basin #4 shown (page 3) running parallel within Columbia pipeline right of way does not comply with Columbia's Right of Way Use Specifications (OEP-152). Roads may cross the pipeline right of way at as close to a ninety degree angle as possible but may not run parallel within Columbia's right of way. The Maintenance Access Drive must be relocated outside of the pipeline right of way (see 3.5.1.C).
- Road "D" is illustrated running parallel outside of the pipeline right of way (page 5) but is noted as not being constructed as a part of this development. All comments regarding this structure will appear under the Patrick Farms Subdivision review.
- Minor grading is indicated within the right of way (page 7). Columbia is unable to comment further as little information is provided concerning changes in elevation. Columbia's Right of Way Use Specifications (OEP-152) prohibit cover over the pipeline being reduced to less than 3 or increased to greater than 5 feet (3.3.1.B). No elevation/grading changes resulting in less than 3 feet or more than 5 feet of cover will be authorized.
- The Drainage Line piping (DMH-D-5 to DMH-D-6) adjacent to WQ Basin #4 crosses Columbia's right of way. Columbia is unable to comment as no further information is provided for this utility.
- Columbia is unable to comment on the Sanitary Sewer (page 13 and 18) crossing Columbia's right of way between SMH #35 to SMH #35A as no further information (size, material, reference to existing pipeline, etc.) is provided with the supplied drawings. Utility installations may cross at least 2 feet underneath of the natural gas pipeline and at as close to a ninety degree angle as possible. All crossings that do not comply with Columbia's guidelines are objectionable.
- Columbia is unable to comment on the Storm Water Drain crossing Columbia's right of way between CB #4-25 to HW #4 as no further information (size, material, reference to existing pipeline, etc.) is provided with the supplied drawings. Utility installations may cross at least 2 feet underneath of the natural gas pipeline and at as close to a ninety degree angle as possible. All crossings that do not comply with Columbia's guidelines are objectionable.
- Trees are illustrated to be planted in the pipeline right of way. This does not comply with Columbia's standards and is objectionable in that no trees may be located within the pipeline right of way. In addition, it should be noted that trees planted close to the edge of the pipeline right of way whose foliage (upon maturity) may extend significantly enough to obscure the right of way from aerial patrol may be side trimmed to enable Columbia to

comply with federal Department of Transportation (DOT) requirements for pipeline inspection.

- It is noted that page 1 of the supplied drawings illustrate Building 46 as being located within the pipeline right of way. It is further noted that subsequent drawings depict this building to be fully outside of the pipeline right of way. Page 1 should be revised to reflect actual conditions.
- The sidewalk shown (page 13) along the outside edge of the pipeline right of way is not objectionable to Columbia.
- Columbia is unable to comment on equipment proposed to operate within the pipeline right of way area. Columbia reviews all equipment and proposed equipment crossings of the pipeline right of way for additional stress on the pipeline facility. The developer will need to advise the contractor for the project of this requirement. Columbia must review and approve all equipment and equipment crosses before activities within the right of way may occur.

Patrick Farms Subdivision (reviewed 10/16/10)

Drawings (Project #09051, Issue 1, Dated 6/2/10 & Rev. Issue 2, Dated 8/12/10) were received and reviewed for engineering impacts. Impacts are listed below along with concerns or objections/no objections from Columbia.

Engineering Impacts:

The Patrick Farms Subdivision will impact Columbia Gas Transmission's high pressure natural gas pipeline in the vicinity of lots 8, 9, 24, 25, 27, 28, 32, 33, 42, 43, 44, 45, 46, 47, 48, 49, 50, 52, 62, 63, 64, 65, 67 and 87. In addition, Columbia's pipeline right of way will be impacted by proposed roads, Road A, Road B, Road D, Road E and Road F as well as associated utilities for the roads and the individual lots noted above and peripheral utilities (i.e. drain lines, etc.).

- Columbia notes its pipeline is not shown as centered within the depicted right of way on the drawings. The pipeline right of way is 50 feet centered on the existing pipeline. This is a concern to Columbia as it has a serious affect on potential impacts and concerns to the pipeline and right of way. Columbia recommends the pipeline be field staked and right of way edges be marked for comparison to submitted drawings.
- Lot 8 (located along Road E)

The grading plans for Lot 8 depict elevation decreases of approximately 2 feet in the right of way area. This conflicts with Columbia's standards and is objectionable to Columbia. No cuts will be authorized within the right of way that reduces the cover over the pipeline to less than the federal DOT regulations (see OEP-152 3.3.1A & 3.3.1B).

Utility installations for this lot are shown outside of the pipeline right of way and are not objectionable to Columbia.

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

- Lot 9 (located along Road E)

The supplied drawings show the edge of the future house being located at the edge of the right of way. Columbia does not object to the proximity of the house to the right of

way but will need to be advised of any excavation activities and equipment used within the right of way area.

The driveway for Lot 9 is objectionable to Columbia. Driveways may cross the right of way area from one side to the other. Pavement within the right of way area that connects to a foundation of a structure poses a safety concern and is objectionable to Columbia.

The grading plans for Lot 9 show slight increases in grade of approximately 1 foot in the right of way area. This does not conflict with Columbia's standards and is not objectionable to Columbia. No cuts will be authorized within the right of way that reduces the cover over the pipeline to less than the federal DOT regulations (see OEP-152 3.3.1A & 3.3.1B).

Utility installations for this lot are shown outside of the pipeline right of way and are not objectionable to Columbia.

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

- Lot 24 (located along Road E)

The driveway entrance for Lot 42 has been reviewed for additional stress loads on the pipeline and is not objectionable to Columbia. Columbia reserves the right to review all equipment proposed for the driveway installation for additional stress loads on the pipeline.

The grading plans for Lot 24 show approximately a 2-4 foot increases in grade in the right of way area. Minor increases in grade (generally 2 foot or less) are not objectionable to Columbia; however, increases greater than 2 feet are objectionable to Columbia.

Columbia is unable to comment on the proposed utility crossings (water, telephone, electric, cable, sewer) for this lot as no further information is provided (see note under Utility Crossings – general).

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

- Lot 25 (located along Road E)

No engineering impacts are noted, however, Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

- Lot 27 (located along Road E)

No engineering impacts are noted, however, Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

- Lot 28 (located along Road E)

The grading plans for Lot 28 show approximately a 2 foot increase in grade in the right of way area. Minor increases in grade (generally 2 foot or less) are not objectionable to Columbia; however, increases greater than 2 feet are objectionable to Columbia.

Columbia is unable to comment on the proposed utility crossings (water, telephone, electric, cable, sewer) for this lot as no further information is provided (see note under Utility Crossings – general).

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

- Lot 32 (located along Road A)

The grading plans for Lot 32 show approximately a 2 foot decrease in grade in the right of way area. Grade reductions across the pipeline right of way area are objectionable to Columbia. No cuts will be authorized within the right of way that reduces the cover over the pipeline to less than the federal DOT regulations (see OEP-152 3.3.1A & 3.3.1B).

Columbia is unable to comment on the proposed sanitary utility crossing of the pipeline right of way for this lot as no further information is provided (see note under Utility Crossings – general).

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

- Lot 33 (located along Road A)

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

- Lot 42 (located along Road D)

The driveway entrance for Lot 42 has been reviewed for additional stress loads on the pipeline and is not objectionable to Columbia. Columbia reserves the right to review all equipment proposed for the driveway installation for additional stress loads on the pipeline.

The grading plans for Lot 42 show approximately a 1-2 foot increase in grade in the right of way area. Minor increases in grade (generally 2 foot or less) are not objectionable to Columbia; however, increases greater than 2 feet are objectionable to Columbia.

Columbia is unable to comment on the proposed utility crossings (water, telephone, electric, cable, sewer) for this lot as no further information is provided (see note under Utility Crossings – general).

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

- Lot 43 (located along Road D)

The driveway entrance for Lot 43 has been reviewed for additional stress loads on the pipeline and is not objectionable to Columbia. Columbia reserves the right to review all equipment proposed for the driveway installation for additional stress loads on the pipeline.

The grading plans for Lot 42 show approximately a 1-2 foot increase in grade in the right of way area. Minor increases in grade (generally 2 foot or less) are not objectionable to Columbia; however, increases greater than 2 feet is objectionable to Columbia.

Columbia is unable to comment on the proposed utility crossings (water, telephone, electric, cable, sewer) for this lot as no further information is provided (see note under Utility Crossings – general).

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

- Lot 44 (located along Road D)

The driveway entrance for Lot 44 has been reviewed for additional stress loads on the pipeline and is not objectionable to Columbia. Columbia reserves the right to review all equipment proposed for the driveway installation for additional stress loads on the pipeline.

The grading plans for Lot 42 show approximately 1-2 foot increases and minor decreases in grade in the right of way area. Minor increases in grade (generally 2 foot or less) are not objectionable to Columbia; however, decreases in grade are objectionable to Columbia.

Columbia is unable to comment on the proposed utility crossings (water, telephone, electric, cable, sewer) for this lot as no further information is provided (see note under Utility Crossings – general).

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

- Lot 45 (located along Road D)

The driveway entrance for Lot 45 has been reviewed for additional stress loads on the pipeline and is not objectionable to Columbia. Columbia reserves the right to review all equipment proposed for the driveway installation for additional stress loads on the pipeline.

The grading plans for Lot 45 show decreases in grade in the right of way area. This conflicts with Columbia's standards and is objectionable to Columbia. No cuts will be authorized within the right of way that reduces the cover over the pipeline to less than the federal DOT regulations (see OEP-152 3.3.1A & 3.3.1B).

Columbia is unable to comment on the proposed utility crossings (water, telephone, electric, cable, sewer) for this lot as no further information is provided (see note under Utility Crossings – general).

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

- Lot 46 (located along Road D)

The driveway entrance for Lot 46 has been reviewed for additional stress loads on the pipeline and is not objectionable to Columbia. Columbia reserves the right to review all equipment proposed for the driveway installation for additional stress loads on the pipeline.

The grading plans for Lot 46 show decreases in grade in the right of way area. This conflicts with Columbia's standards and is objectionable to Columbia. No cuts will be

authorized within the right of way that reduces the cover over the pipeline to less than the federal DOT regulations (see OEP-152 3.3.1A & 3.3.1B).

Columbia is unable to comment on the proposed utility crossings (water, telephone, electric, cable, sewer) for this lot as no further information is provided (see note under Utility Crossings – general).

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

- Lot 47 (located along Road D)

The driveway entrance for Lot 47 has been reviewed for additional stress loads on the pipeline and is not objectionable to Columbia. Columbia reserves the right to review all equipment proposed for the driveway installation for additional stress loads on the pipeline.

Columbia is unable to comment on the proposed utility crossings (water, telephone, electric, cable, sewer) for this lot as no further information is provided (see note under Utility Crossings – general).

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

- Lot 48 (located along Road D)

The driveway entrance for Lot 48 has been reviewed for additional stress loads on the pipeline and is not objectionable to Columbia. Columbia reserves the right to review all equipment proposed for the driveway installation for additional stress loads on the pipeline.

The grading plans for Lot 48 show slight decreases in grade in the right of way area. This conflicts with Columbia's standards and is objectionable to Columbia. No cuts will be authorized within the right of way that reduces the cover over the pipeline to less than the federal DOT regulations (see OEP-152 3.3.1A & 3.3.1B).

Columbia is unable to comment on the proposed utility crossings (water, telephone, electric, cable, sewer) for this lot as no further information is provided (see note under Utility Crossings – general).

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

- Lot 49 (located along Road D)

The driveway entrance for Lot 49 has been reviewed for additional stress loads on the pipeline and is not objectionable to Columbia. Columbia reserves the right to review all equipment proposed for the driveway installation for additional stress loads on the pipeline.

The grading plans for Lot 49 show very slight grading changes and will not be objectionable to Columbia.

Columbia is unable to comment on the proposed utility crossings (water, telephone, electric, cable, sewer) for this lot as no further information is provided (see note under Utility Crossings – general).

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

- Lot 50 (located along Road D)

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

- Lot 52 (located along Road F)

The driveway entrance for Lot 52 is objectionable to Columbia as illustrated. Driveways may cross the right of way area from one side to the other at as close to a 90-degree angle as possible.

The grading plans for Lot 52 depict elevation decreases of approximately 2 feet in the right of way area. This conflicts with Columbia's standards and is objectionable to Columbia. No cuts will be authorized within the right of way that reduces the cover over the pipeline to less than the federal DOT regulations (see OEP-152 3.3.1A & 3.3.1B).

Columbia is unable to comment on the proposed utility crossings (water, telephone, electric, cable, sewer) for this lot as no further information is provided (see note under Utility Crossings – general).

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

- Lot 62 (located along Road D)

No engineering impacts are noted, however, Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

- Lot 63 (located along Road D)

No engineering impacts are noted, however, Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

- Lot 64 (located along Road D)

No engineering impacts are noted, however, Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

- Lot 65 (located along Road D)

No engineering impacts are noted, however, Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

- Lot 67 (located along Route 306)

The grading plans for Lot 67 show decreases in grade in the right of way area. This conflicts with Columbia's standards and is objectionable to Columbia. No cuts will be autho-

alized within the right of way that reduces the cover over the pipeline to less than the federal DOT regulations (see OEP-152 3.3.1A & 3.3.1B).

Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

- Lot 87 (located along Road D)

No engineering impacts are noted, however, Columbia recommends potential buyers be advised of Columbia's right of way guidelines regarding structures (fences, trees, pools, etc.) within the right of way area.

- Road "E" Crossing

The Road "E" crossing (between 17+00- 19+00) has been reviewed for compliance with Columbia's standards for such facilities, including evaluation of additional stress loads on the pipeline, angle crossing, cover over the pipeline, etc. The supplied drawings do not provide information concerning Columbia's pipeline depth in the area of the proposed road. Minor fills and cuts are illustrated on the profile drawings. Be advised, minor fills, generally less than 2 feet will be approved, however, no reductions in cover over the pipeline will be authorized. In addition, Columbia may require the pipeline be exposed in the area of the road crossing to physically inspect the pipeline and pipeline coating prior to the installation of the road. This process is fully reimbursable to Columbia and must follow all of Columbia's standards for excavation, backfill and cathodic protection.

Columbia may restrict vibratory rollers being used within its right of way and must be apprised of all equipment proposed to be used within the right of way for the installation of the road in order to determine additional stress loads on the pipeline.

Columbia is unable to comment on the associated utilities to be installed with the road as no further information has been provided in regards to sizes, materials, depths in relationship to the existing pipeline (see note under Utilities).

- Road "F" Crossing

The Road "F" crossing (between 9+00-11+00) has been reviewed for compliance with Columbia's standards for such facilities, including evaluation of additional stress loads on the pipeline, angle crossing, cover over the pipeline, etc. The supplied drawings do not provide information concerning Columbia's pipeline depth in the area of the proposed road. Minor fills and cuts are illustrated on the profile drawings. Be advised, minor fills, generally less than 2 feet will be approved, however, no reductions in cover over the pipeline will be authorized. In addition, Columbia may require the pipeline be exposed in the area of the road crossing to physically inspect the pipeline and pipeline coating prior to the installation of the road. This process is fully reimbursable to Columbia and must follow all of Columbia's standards for excavation, backfill and cathodic protection.

Columbia may restrict vibratory rollers being used within its right of way and must be apprised of all equipment proposed to be used within the right of way for the installation of the road in order to determine additional stress loads on the pipeline.

Columbia is unable to comment on the associated utilities to be installed with the road as no further information has been provided in regards to sizes, materials, depths in relationship to the existing pipeline (see note under Utilities).

- Road "A" Crossing

The Road "A" crossing (between 5+00- 7+00) has been reviewed for compliance with Columbia's standards for such facilities, including evaluation of additional stress loads on the pipeline, angle crossing, cover over the pipeline, etc. The supplied drawings do not provide information concerning Columbia's pipeline depth in the area of the proposed road. Minor fills and cuts are illustrated on the profile drawings. Be advised, minor fills, generally less than 2 feet will be approved, however, no reductions in cover over the pipeline will be authorized. In addition, Columbia may require the pipeline be exposed in the area of the road crossing to physically inspect the pipeline and pipeline coating prior to the installation of the road. This process is fully reimbursable to Columbia and must follow all of Columbia's standards for excavation, backfill and cathodic protection.

Columbia may restrict vibratory rollers being used within its right of way and must be apprised of all equipment proposed to be used within the right of way for the installation of the road in order to determine additional stress loads on the pipeline.

Columbia is unable to comment on the associated utilities to be installed with the road as no further information has been provided in regards to sizes, materials, depths in relationship to the existing pipeline (see note under Utilities).

- Road "B" Crossing

The Road "B" crossing (between 15+00- 16+00) has been reviewed for compliance with Columbia's standards for such facilities, including evaluation of additional stress loads on the pipeline, angle crossing, cover over the pipeline, etc. The supplied drawings do not provide information concerning Columbia's pipeline depth in the area of the proposed road. Minor fills and cuts are illustrated on the profile drawings. Be advised, minor fills, generally less than 2 feet will be approved, however, no reductions in cover over the pipeline will be authorized. In addition, Columbia may require the pipeline be exposed in the area of the road crossing to physically inspect the pipeline and pipeline coating prior to the installation of the road. This process is fully reimbursable to Columbia and must follow all of Columbia's standards for excavation, backfill and cathodic protection.

Columbia may restrict vibratory rollers being used within its right of way and must be apprised of all equipment proposed to be used within the right of way for the installation of the road in order to determine additional stress loads on the pipeline.

Columbia is unable to comment on the associated utilities to be installed with the road as no further information has been provided in regards to sizes, materials, depths in relationship to the existing pipeline (see note under Utilities).

- Road "D" Installation

Road "D" is shown running parallel (3+00-13+00) outside of Columbia's pipeline right of way and is not objectionable to Columbia, however, Columbia is to be advised and must approve all equipment that is proposed to operate in or across its right of way. In addition, the dedicated public road right of way may not extend over Columbia's private pipeline right of way.

- Landscaping

The drawings denote a five foot (5') wide tree easement to be located within Columbia pipeline right of way. This easement along with all intended trees is objectionable to Columbia. No trees may be planted in the pipeline right of way. Please note previous side trimming comment regarding trees whose limbs may extend over the right of way area.

Bushes, shrubs less than 5 feet may be planted within the right of way area but not directly over the pipeline (see guidelines or OEP-152 3.4.2 A-D).

- WQ Basin #4

WQ Basin #4 is proposed to be installed at the edge of Columbia's right of way. It is noted as not being constructed as part of this development. All comments regarding this structure will appear under the Patrick Farms Condominium review.

- Drain Line Crossing DMH #9-15 to DMH #9-16

Columbia is unable to comment on this proposed utility crossing terminating at WQ Basin #9 as no further information is provided (see note under Utility Crossings – general).

- Drain Line Crossing DMH #10-16 to CB #10-6

Columbia is unable to comment on this proposed utility crossing terminating at WQ Basin #10 as no further information is provided (see note under Utility Crossings – general).

- Sanitary Line Crossing SMH #35 to SMH #35A

Columbia is unable to comment on this proposed utility crossing in the vicinity of WQ Basin #4 as no further information is provided (see note under Utility Crossings – general).

- Drain Line Crossing CB #4-25 to HW #4

Columbia is unable to comment on this proposed utility crossing terminating at WQ Basin #4 as no further information is provided (see note under Utility Crossings – general).

- Sanitary Sewer Easements

The proposed drainage easements to benefit the Town of Ramapo that cross Columbia's private pipeline right of way are not objectionable to Columbia however, it should be clearly understood that the public drainage easements would be subservient to Columbia's pre-existing private right of way agreement.

- Equipment Crossings

No Equipment Crossings of Columbia's pipeline right of way are identified on the drawings. Equipment crossings must be identified by the developer/contractor and all equipment must be reviewed and approved by Columbia before it may cross the pipeline. All equipment crossings must be clearly marked and maintained (after installation) after approval has been received. The right of way may not be used in areas outside of the pre-determined and approved crossings points.

General Notes:

Utility Crossings (general)

The drawings identify numerous utility crossings. However, no information is provided regarding sizes, material, depth, relationship to existing pipeline (clearances), etc. The following information is provided for design purposes.

Utilities installations must cross at least 2-feet underneath the pipeline unless the pipeline is abnormally deep and at as close to a 90-degree angle as possible. All permitted cable/wire utilities crossing below Columbia pipelines including, but not limited to, fiber optic, electric, telephone and television (excluding single telephone and single television drops), shall be encased with a minimum of 2 inch Schedule 40 PVC pipe, or equivalent, for the complete width of the ROW.

For safety reasons, electric and fiber optic lines shall also be surrounded with a minimum of six inches of red colored concrete or 4-inch minimum diameter, .237 inch wall thickness, coated steel pipe across the full width of the Columbia right-of-way.

Metallic Utility Crossings shall have bonds, test leads or other corrosion protection materials installed by Columbia at the expense of the Developer where necessary, at Columbia's sole determination. Metallic Utilities shall be coated with a non-conductive coating for the entire width of the NGTS right-of-way. The Developer shall be responsible for the protection of facilities against Columbia's Cathodic Protection system.

Non-Metallic Utilities shall be wrapped with tracer wire for the full width of Columbia's right-of-way unless otherwise permitted by Columbia. At locations where tracer wire is installed, tracer wire shall be raised to the ground surface and connected to a test station for monitoring.

Natural gas (or other industrial gas) pipelines crossing below Columbia's pipelines shall either be encased in a 6-inch envelope of yellow 2,000 psi concrete or encased in 4-inch minimum diameter, standard inch wall thickness, coated steel pipe across the full width of the NGTS right-of-way. Utilities permitted by NGTS to cross above the pipelines, shall be encased in 4-inch minimum diameter, standard inch wall thickness, coated steel pipe across the full width of the NGTS right-of-way.

In addition to the specific items detailed above, we have a number of universal concerns: grading, blasting, landscaping, pavement, utility and equipment crossings. Because very little information was provided regarding Columbia's pipeline relationship to the proposed utility, driveway and road crossings, we cannot yet address those issues. Please bear in mind that until all objections have been resolved, Columbia will authorize **no** work within our right of way.

Your contractors may use copies of the enclosed *Equipment Crossing Data* and *Blasting Data* sheets. Please provide them well in advanced of proposed use. Our operations people will assist in establishing equipment crossings and blasting precautions. Columbia inspectors must be present whenever work takes place near our facilities. Two or three days' notice should suffice to ensure that personnel are available.

Thank you for providing this latest set of plans. We look forward to working with you as you bring this project to fruition.

Sincerely,

Robert W. Schini, Jr., Land Agent
Enclosures

November 17, 2010

Palisades Interstate Park Commission
Administration Building
Bear Mountain, New York 10911-0427

Att: Karl B. Roecker, Landscape Architect

Re: **Patrick Farm SUBDIVISION**
LJA#09051

Dear Mr. Roecker:

In response to your October 20, 2010 letter to the Town of Ramapo Planning Board and pursuant to our coordination meeting held on November 16, 2010 we offer the following additional information for your consideration:

1. We appeal to you to reconsider your statement that our Subdivision Plans dated 8-12-10 represent a significant digression from the design ideals described in the FEIS.

We understand that your statement was made primarily with regard to the proposed improvements at the vicinity of the private driveway and dwelling sites that will serve single-family lots 1, 2, & 3. We also understand that you made this statement because you have had an issue reconciling portions of FEIS Response 3.9-15 with our Subdivision Plans dated 8-12-10. We wish for you to reconsider that our 8-12-10 plans are substantially consistent with the plans as included as part of the FEIS and that we seek to remain true and consistent to the DEIS and FEIS documents. Both the path that the private driveway follows and the width of the private driveway are intended to be consistent with the information presented in the FEIS. Lastly, we wish for you to consider that Comment 3.9-15 acknowledges that the Applicant has included project modifications to preserve the top of the ridgeline and that the rest of the ridge in the southwest portion of the property remains undisturbed.

2. Nevertheless, following our meeting on November 16, 2010 we have revisited the design as presented in our 8-12-10 Subdivision Plans and are pleased to present two versions of the following drawing:
 - Drawing SK-1 Revised Layout Sketch: Lots 1, 2, 3, 4, 5, 81 & 82, dated 11/18/10.
 - Drawing SK-2 Revised Overlay Sketch: Lots 1, 2, 3, 4, 5, 81 & 82, dated 11/18/10.

This revised plan reflects our efforts to move the common driveway and the lot 1, 2, & 3 homes further off the ridgeline. Please note the following changes:

- a) The driveway has now been relocated to the opposite (down) side of the ridge. No walls are required for the driveway which will now be situated on the back slope from the Park.
- b) The three homes have now been situated off of the greater ridge and have been site to blend into the existing surrounding topography.

Leonard Jackson PE PLLC dba Leonard Jackson Associates

Leonard Jackson Associates

We have endeavored to make this development as sensitive as possible to the ridgeline. In addition, we have re-sited the homes at Lots 81 & 82 to further minimize grading so the home blend better with exiting topography.

3. Following is additional information provided in response to comments made by other agencies which you also cited in your letter:

Comments 21, 22, 24, 25 and 26 of the Rockland County Department of Planning letter dated July 15, 2010:

Response to Comment 21:

Easement configurations have been indicated on the Subdivision Plat. They will be revised as appropriate to complement revisions as they are made to the plans. Specific easement descriptions are premature at this juncture however they will be prepared as required prior to signature of the final plans. County Planning and the PIPC are welcome to inspect any details associated with the easement as shown on the Plat as well as the forthcoming easement descriptions in the future.

Response to Comment 22:

We see no issue with the shape of Lot 32. County Planning and/or the PIPC may wish to present any specific issues they may have with respect to the shape of Lot 32. No liability issues exist with respect to the ramp. A maintenance easement will make lot 89 responsible for all maintenance. This type of maintenance arrangement is commonplace and there is no need to alter lot lines.

Response to Comment 24:

Maintenance of the fence surrounding the Mather Farmstead will be the responsibility of Lot 51 and will be indicated on the map notes. The easement is currently indicated on the plans.

Response to Comment 25:

Driveways serving lots 66 and 67 are indicated on the plans. We see no reason to eliminate lots 66 and 67.

Response to Comment 26:

Lot 79 complies with all bulk requirements associated with the R-40 district. Furthermore the subdivision plans demonstrates from a grading, drainage utility perspective how the lot can support a single family home. Lot 79 is not responsible for maintenance of the stormwater basin which will be maintained by Lot 89. This type of maintenance arrangement is commonplace and there is no need to alter lot lines.

Leonard Jackson Associates

F.P. Clark's Supplemental Comments dated July 19, 2010:

We have provided a copy of pages 1 thru 9 of a 22 page document dated August 12, 2010 which responded to all of the subject comments.

Please review our attachments and let us know if we have provided adequate plan revisions in response to your concerns.

Very truly yours,



LEONARD JACKSON ASSOCIATES

Dennis Rocks, P.E., CFM

Attach

P:\Word-Files\2009\09051\SUBDIVISION\Preliminary\PIPC_letter_11-17-10.doc



SK-2 Drawing Number	Scale: 1" = 40' Date: 11/18/10	Drawn by: AM Job Number: 09051	PATRICK FARM SUBDIVISION TOWN OF RAMAPO ROCKLAND COUNTY, NEW YORK	LJA LEONARD JACKSON ASSOCIATES CONSULTING ENGINEERS 26 FIREMENS MEMORIAL DRIVE, POMONA, NEW YORK 10970 phone: (845) 354-4382 fax: (845) 354-4401	LEONARD JACKSON, P.E. N.Y.S. Lic. No. 42167	REV.	DESCRIPTION	DATE
			REVISED OVERLAY SKETCH: LOTS 1, 2, 3, 4, 5, 81 & 82					

**PATRICK FARM
WORKFORCE AND VOLUNTEER HOUSING AGREEMENT
NOVEMBER 22, 2010**

Regulations and Procedures

Scenic Development LLC, is proposing the construction of 497 residential units including 87 single family homes and 410 multifamily units composed of 314 market rate townhouse units for sale, 72 workforce condominium flats for sale and 24 rental units to meet the needs of community service workers. The 208.5 acre project site, known locally as Patrick Farm, is located southeast of US Route 202 and west of NYS Route 306 in the unincorporated Town of Ramapo, Rockland County, NY. The multifamily housing is proposed consistent with the need for a diversity of housing unit types and price points to meet the needs of the general population including workforce and community service workers.

Consistent with the SEQRA findings for the Patrick Farm project, at the directive of the Ramapo Town Board in resolution No. 2010-100, the Town of Ramapo Planning Board, herein referred to as Planning Board, needs to adopt eligibility standards and procedures for the implementation of the proposed volunteer and workforce housing to be constructed as part of the Patrick Farms project. It is anticipated that the Town of Ramapo Planning Board or an Advisory Board designated by the Planning Board shall monitor and implement this program, including maintaining a list of income eligible qualified applicants for the 72 units of workforce housing; and a list of eligible community service workers for the 24 units of rental apartments.

WORKFORCE HOUSING

In furtherance of the legislative purposes sought to be achieved by the adoption of the Affordable Workforce Housing agreement in general, and the affordable unit component thereof, in particular, the following regulations and procedures shall govern the eligibility, selection, pricing and resale pricing of all affordable units developed as part of such an approved Affordable Workforce Housing Agreement that includes such units.

A. Income and Asset Eligibility Criteria

Affordability. All dwelling units constructed as part of the work force housing shall be affordable to moderate-income residents.

(1) The levels of gross family income designated as moderate income shall be determined by the Planning Board. In making such determination, the Planning Board shall consider, among other factors, family size and number of dependents, income of all wage earners in the household and sources of household income. As a general guide, moderate income shall not be more than 80% of the median family income (based on family size) for Rockland County families established annually by the US Department of Housing and Urban Development.

(2) The sale price of housing for dwelling units, including closing costs and fees, shall not exceed the applicable maximum sales price as established by resolution of the Planning Board. These sales prices shall be based upon the understanding that the purchaser's monthly costs for housing (mortgage, insurance, taxes, utilities and maintenance charges) shall not exceed

35% of the maximum gross monthly income for the average monthly income of a moderate-income family.

(3) Household income is defined as the total annual household income of the title owners of the affordable unit - those persons whose names will appear on the deed of the affordable unit. Household income includes both earned income and passive income. Income of adult children who live with their parents will be excluded, unless they are also on title.

Household income includes the following:

- earned income from current employment, social security and/or pensions;
- passive income, including interest from income producing assets, dividends, investments, real estate, etc. Assets to be counted in the asset calculation include but are not limited to the following income producing or appreciating assets:
 - revocable trusts, stocks, bonds, treasury funds, mutual funds,
 - cash, bank deposits,
 - other assets that are a part of an active business,
 - income from real estate.
- Assets to be excluded are non-income producing personal property such as safe deposit box contents, and the cash value of life insurance policies. The value of any pension or retirement instrument will not be counted unless the person is drawing it down as income. (Generally, pensions or other similar retirement vehicles are intended to be drawn down as income during retirement and have a penalty imposed upon early withdrawal.)

(4) Income and Asset Certification - Income certification will be performed by a management agent to be designated by the Planning Board. Once an apparently eligible applicant has been offered a unit, the applicant must submit documentation for income / asset certification consisting of:

- paycheck stubs;
- W2s and tax returns for the past two years;
- a verified statement of assets

The Planning Board's designated agent will review the submission and inform each applicant in writing whether they meet the income and asset eligibility criteria. For those who are eligible, the Planning Board's designated agent will certify to the Town that each applicant meets the income / asset eligibility guidelines.

B. Eligibility Priorities

Moderate-income families applying for moderate-income units shall be selected on a first-come, first-served system, with priority given to first time home buyers, and the following categories, in order of priority, shall be utilized:

- (1) Residents of the unincorporated Town of Ramapo at the time of application and their family members who, at one time, resided with such residents within the Town.
- (2) Residents of the incorporated Villages contained within the Town of Ramapo at the time of application and their family members who, at one time, resided with such residents within the Villages.
- (3) Parents and siblings of Ramapo residents at the time of application, or the deceased spouses of such residents. Former residents of the Town of Ramapo with relatives currently residing within the Town.
- (4) Persons employed by the Town of Ramapo at the time of application. Law enforcement officers residing within the County of Rockland at the time of application or employed as law enforcement officers within the County of Rockland at the time of application. Volunteers in good standing at the time of application serving the Ramapo Valley Ambulance Corps or the Hillcrest Volunteer Fire Company and who have served same for one or more continuous years.
- (5) Residents of Rockland County
- (6) All others.

C. Administration

(1) Following the approval of this development, by the Planning Board, the Board's designated agent shall be responsible for the administration of the requirements of administering affordable housing at Patrick Farms. The Planning Board shall be responsible for the promulgation of such rules and regulations as may be necessary to implement such requirements. The Planning Board shall retain discretion to contract for any aspect of administrative or consulting services relating to administering any of the affordability aspects of the program, or may decide to control the process entirely within the Town by, for example, the formation of and appointment of a board or commission.

(2) The Planning Board's designated agent, shall certify as eligible all applicants for the moderate-income dwelling units.

(3) The Planning Board's designated agent, shall, following outreach to potential buyers as described herein, maintain a list of preliminary eligible applicants.

(4) Outreach to Potential Buyers - To ensure that residents have current information about the available units of workforce housing, the Town in conjunction with the Planning Board's designated agent, will host an informational workshop before the affordable units of the Patrick Farm development come on line. The agenda will cover:

- income eligibility; asset limitations; verification process and resale restrictions

- restrictive covenant; duration of affordability and preferences;
- presentation of development (renderings);
- identification of units available for purchase;
- square footage, number of bedrooms (floor plans); common charges, taxes for each unit;
- amenities;
- offering plan overview;
- example of mortgage amount and monthly payment for the unit.

(5) Initial Application - If a prospective purchaser decides to participate in the program, he or she must submit an Initial Application within thirty days following the Information Meeting, together with a \$100 application fee. The Initial Application shall also be used to ascertain eligibility and whether an applicant meets any preference category. That determination will be made by the Planning Board's designated agent. The prospective purchaser will be notified in writing as to the eligibility determination including identification as to which of the six preference categories the application is designated.

(6) Contract - After eligibility is certified for an applicant, the applicant will have thirty (30) days within which to enter into a contract with the developer and, if necessary, apply for a mortgage. If the applicant cannot sign a contract within the deadline or negotiate an extension with the developer, the unit will be offered to the next person.

D. Restriction on Sale and Subsequent Resale.

(1) Every purchaser of a moderately priced dwelling unit shall certify, on a form prescribed by the Town, that he/she is acquiring said unit for his/her primary place of residence. Purchasers of moderately priced dwelling units shall not be permitted to lease said units to other parties, this being enforced by a deed restriction.

(2) Moderately priced dwelling units constructed or offered for sale in the Patrick Farm workforce housing, may be sold at any time following the date of original sale. However, the sale price shall not exceed a price that equals the original purchase price, plus a four percent increase, compounded annually, from the date of initial purchase, plus a fair market value for improvements made to the unit, as documented by submitted receipts, not to exceed \$25,000.

(3) Affordable units shall remain affordable, meaning they shall remain subject to these regulations and procedures, as same may be amended from time to time, for a period of 15 years measured from the date of initial sale. The restrictions on ownership, price and eligibility, and these implementing regulations, as from time to time may be amended, shall be embodied in a Deed Restrictive Covenant, in a form approved by the Town Attorney, recorded against each affordable unit.

(4) A limited number of units may be sold to "Charitable Investors" to lease, to income eligible tenants for a term of not more than two years, with renewal at the discretion of the Management Agent for the Ramapo Planning Board, such units charging not more than FAIR MARKET RENTS for Rockland County, New York as published by the US Department of Housing and Urban Development (HUD) for the year the lease is entered into or renewed.

E. Tax Assessment

The restricted sales value of the moderate-income dwelling unit in a development shall be taken into consideration by the Town of Ramapo Tax Assessor in determining the basis for assessments of such units.

F. Continuing Eligibility

The Town of Ramapo has the right and may require evidence of continuing eligibility of the purchaser after occupancy.

G. Purchase Price Example (2010)

Based upon an income limit of \$81,300 (80% of the 2010 Rockland County Median Family Income MFI 101,600), assuming a 30 year mortgage, at 4.5%, and assuming \$4,500 in annual property taxes and monthly maintenance fees of \$175, The Workforce Housing units would be first sold at an average of about \$295,000.

COMMUNITY SERVICE WORKER HOUSING

Determination of eligibility will be conducted by the Management Agent for the Ramapo Planning Board. Implementation and monitoring of the 24 units of Community Service Volunteer rental apartments will be conducted by this Management Agent. The Community service volunteer workers shall have a minimum of one year of continuous community service before they are eligible for the Community Service Volunteer worker apartments. The lease term shall be for a maximum period of 3 years after which time the tenants would have to re-certify their Community Service Volunteer worker status.

The above Procedures and Regulations were duly adopted by the Ramapo Town Board, as Resolution No. ___ of 2010, on _____.

Community Services

This section of the DEIS addresses the project's potential impacts on the community services, including the East Ramapo School District. In order to assess the demand that Patrick Farm would place on these services, the anticipated population, including public school-age children, must be estimated.

According to the American Community Survey, taken by the US Census, the 2007 projected population for the Town of Ramapo is 112,980 persons. In order to determine the number of persons and school-age children that would be generated by Patrick Farm, multipliers published by various sources were reviewed to determine which multipliers would be appropriate for the type of housing product that is proposed. A review of the 2000 US Census data for the villages of Suffern, Monsey, Pomona and Spring Valley were reviewed, in addition to the population projections for the design volume of water and sewer utilization. The data were compared to the demographic multipliers in the Burchell and Listokin population research for the Rutgers University Center of Demographic Research published in June 2006, included as Appendix J of the DEIS. Since the Rutgers University data were specific to geographic region and broken down by bedroom count, these multipliers were relied upon to estimate the project's population, including school-age children. For purposes of this analysis, the population projection for Patrick Farm is based on the demographic information for the "Single family attached and detached categories" of housing types for New York State and is based on the 2000 US Census Bureau data.

A summary of the demographic multipliers used in this analysis is provided in Table 1. The proposed 497 units are projected to add a total of 1,932 persons to the Town of Ramapo's existing population. The total population of 1,932 persons includes approximately 609 school age children.

Table 1 Demographic Multipliers for Population Projections						
Unit Type	Number of bedrooms per unit	Number of Units	Population Multiplier	Total Population	School Age Children Multiplier	Total School Age Children
Townhouse Type I	4	178	3.83	682	1.19	212
Townhouse Type II	4	136	3.83	521	1.19	162
Workforce Condominium Flats	4	72	3.83	276	1.19	86
Single Family Homes	5	87	4.52	393	1.58	137
Emergency Service Worker Apartments	2	24	2.51	60	0.49	12
Total		497		1,932		609

Source: Rutgers Center for Demographic Research, June 2006. Table prepared by TMA, 2008.

East Ramapo Central School District

The entire site is located in the East Ramapo Central School District. Existing Annual property tax revenues that accrue to the East Ramapo Central School District total approximately \$150,409 for the 2008-2009 school year.

The East Ramapo Central School District collects taxes for the libraries within the district. The libraries currently receive \$7,125 annually in property taxes from the Patrick Farm site.

Potential Impacts

For purposes of the analysis of impacts, projected annual property tax revenues were calculated by estimating the future assessed value of the new development applicable to each taxing jurisdiction and multiplying same by the tax rate applicable to each taxing jurisdiction.

Projected Tax Revenues

Consistent with fiscal impact methodology¹, the property tax revenues have been determined by considering what would be generated if the development were completed and occupied today. This approach recognizes that development often requires several years to be completed and that inflation will increase costs and revenues over time. It assumes that the rising costs of public services will be matched by an essentially comparable increase in revenues through increases in the tax rate, all other things being held constant.

The Patrick Farm development would result in the conversion of predominately vacant land to a residential development. The increased market value of the project site, with these improvements, would result in an increase in property tax revenues.

The Patrick Farm Development, would consist of 497 residential units including 87 single family homes on individual lots, 386 multifamily units, of which 314 units would be market rate townhouses and 72 units would be offered as workforce condominium flats. In addition twenty-four (24) rental apartments would be set aside as community service worker housing.

¹ The Fiscal Impact Handbook, Robert Burchell and David Listokin, 1978.

Excerpts from DEIS Community Services and Fiscal Analysis

September 27, 2010

The total assessed value of the Patrick Farm development is projected to be \$31,319,419. Table 2 summarizes the assessed value of the proposed development.

Table 2 2008 Assessed Value of Patrick Farm		
Development Type	Projected Market Value	Projected Assessed Value
87 Single Family Residential Units	\$69,600,000	\$8,616,480
314 Market Rate Townhouses	\$158,256,000	\$19,592,092
72 Workforce Condominium Flats	\$21,240,000	\$2,629,512
24 Emergency Service Worker Apartments	\$3,888,000	\$481,334
Total	\$252,984,000	\$31,319,419

Table prepared by Tim Miller Associates, Inc., 2008.

Table 3 estimates the annual property tax revenues that would be generated by 87 single family homes, 314 market rate townhomes, 72 workforce townhomes and 24 emergency service worker apartments to be located on the Patrick Farm site, in the Town of Ramapo.

Table 3 Patrick Farm 2008 Projected Property Tax Revenues		
Taxing Jurisdiction	Current Property Tax Revenues	Projected Property Tax Revenues
Rockland County	\$15,141	\$313,194
Town of Ramapo Police	\$30,013	\$620,832
General Town	\$13,530	\$279,873
Unincorporated Town	\$7,483	\$154,781
Ramapo Ambulance District	\$2,654	\$54,903
Moleston Fire District	\$4,107	\$115,111
Tallman Fire District	\$927	\$0
Ramapo Lighting District	\$1,057	\$21,861
Sewer District RR	\$7,039	\$145,613
County Solid Waste	\$1,599	\$33,086
Misc. Fees	\$1,963	\$40,715
Total Town of Ramapo	\$70,373	\$1,426,061
East Ramapo Central	\$150,409	\$3,190,268
Finkelstein Library	\$7,125	\$151,119
ERCS Town Fee	\$1,535	\$33,414
Total East Ramapo Central	\$159,069	\$3,374,801
TOTAL	\$244,622	\$5,114,056

Source: Town of Ramapo, Tax Receiver's Office;
Tim Miller Associates, Inc., 2008

East Ramapo Central School District Revenue

As shown in Table 3.7-4, Patrick Farm would generate annual property tax revenues of \$3,190,268 directly to the East Ramapo Central School District. In addition \$151,119 would benefit the East Ramapo Finklestein Memorial Library.

East Ramapo Central School District Costs

Patrick Farm would generate annual property tax revenues of \$3,190,268 to the East Ramapo Central School District. Since school costs typically represents the largest share of costs associated with any residential development, the cost to the school district is calculated.

The budget for the 2008-2009 school year for the East Ramapo Central School District totaled approximately \$192,728,148. Of this total, \$134,559,794, was raised by the school tax levy; the remainder of the costs are paid through state aid and other revenue sources. Current school district enrollment is approximately 8,000 students. Approximately 70 percent of the budget is met through the property tax levy. Thus, the program cost per student to be raised through property taxes is approximately \$11,774 per student.

As noted in Chapter 3.6 of this DEIS, the total number of schoolage children to be generated by the project was calculated based on student multiplier data available from the Rutgers Center for Urban Policy Research, June 2006. Based upon this data approximately 609 students would be projected to live at Patrick Farm. The East Ramapo School District is unique in that approximately 67 percent of the school children that live in the district attend private school. Based upon this proportion, approximately 201 students may be introduced into the East Ramapo Central School District. The district has been suffering with declining enrollment and an influx of publicly-enrolled students to this district would be a beneficial impact.

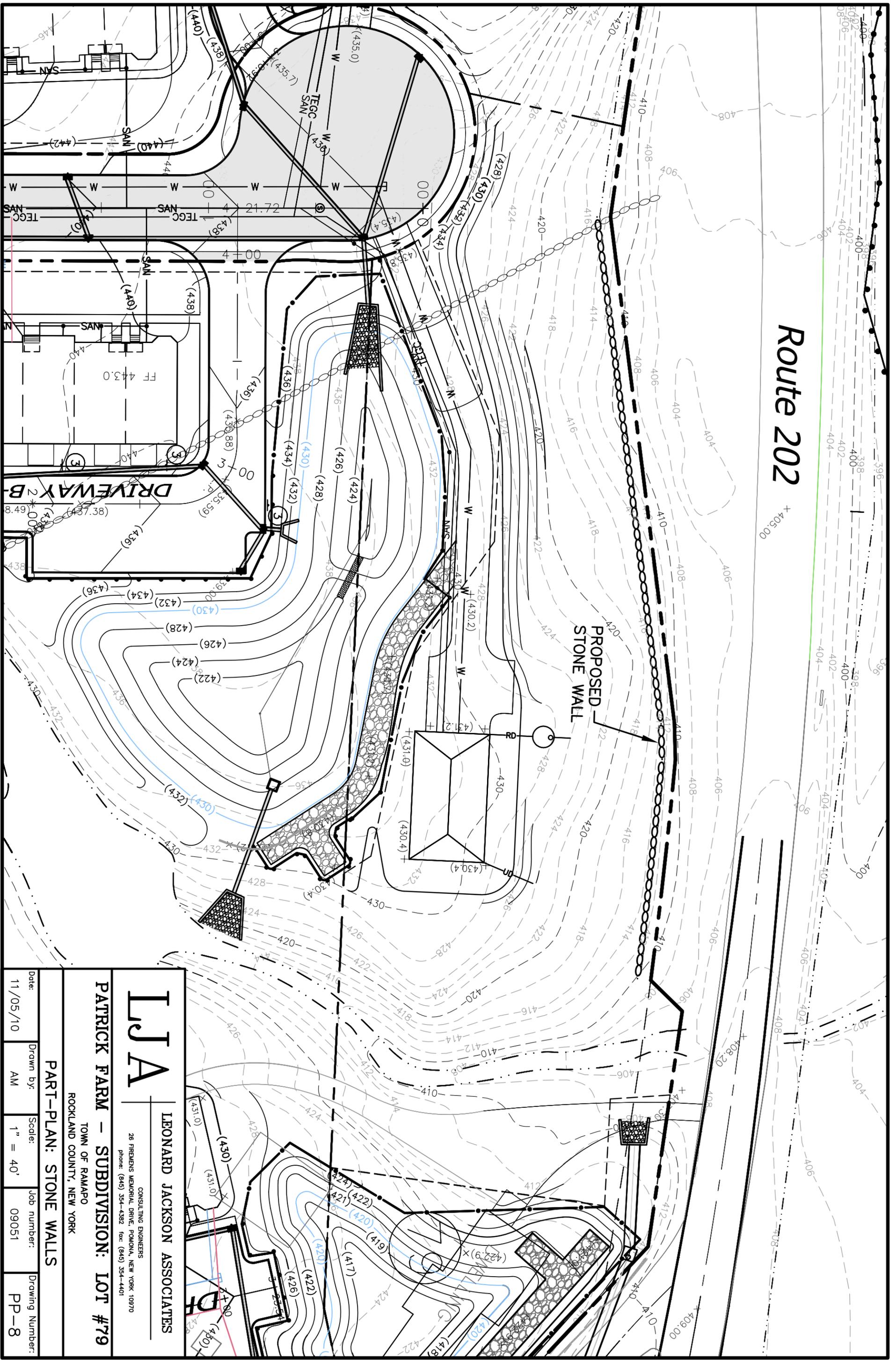
Based upon the projected cost per student of \$11,774 derived above, the 201 additional students that may be introduced to the School District would increase costs to the District by about \$2,366,574 annually. In addition to the cost for students enrolled in the public school, the East Ramapo Central School District's Office of Funded programs provides services to approximately 17,000 non-public school students. The per student cost for this service to be paid by the property tax levy is estimated at approximately \$625 per student². These costs include bus transportation and nursing services provided to the non-public school population. The increased cost to the school district from 408 Patrick Farm students who may attend private school is projected to be \$255,000.

The proposed Patrick Farm development will generate a total of \$3,374,801 in annual property tax revenues to the school district, including the Library tax and the Schools Town Fee. The increase in assessed valuation will generate \$3,215,732 above current taxes. After meeting the projected combined costs of school district services to both public and private school students of up to \$2,621,574, the overall effect on the district's budget is projected to be positive.

² Phone conversation with East Ramapo School Board Treasurer, Mr. Bier on January 8, 2009.

Mitigation Measures

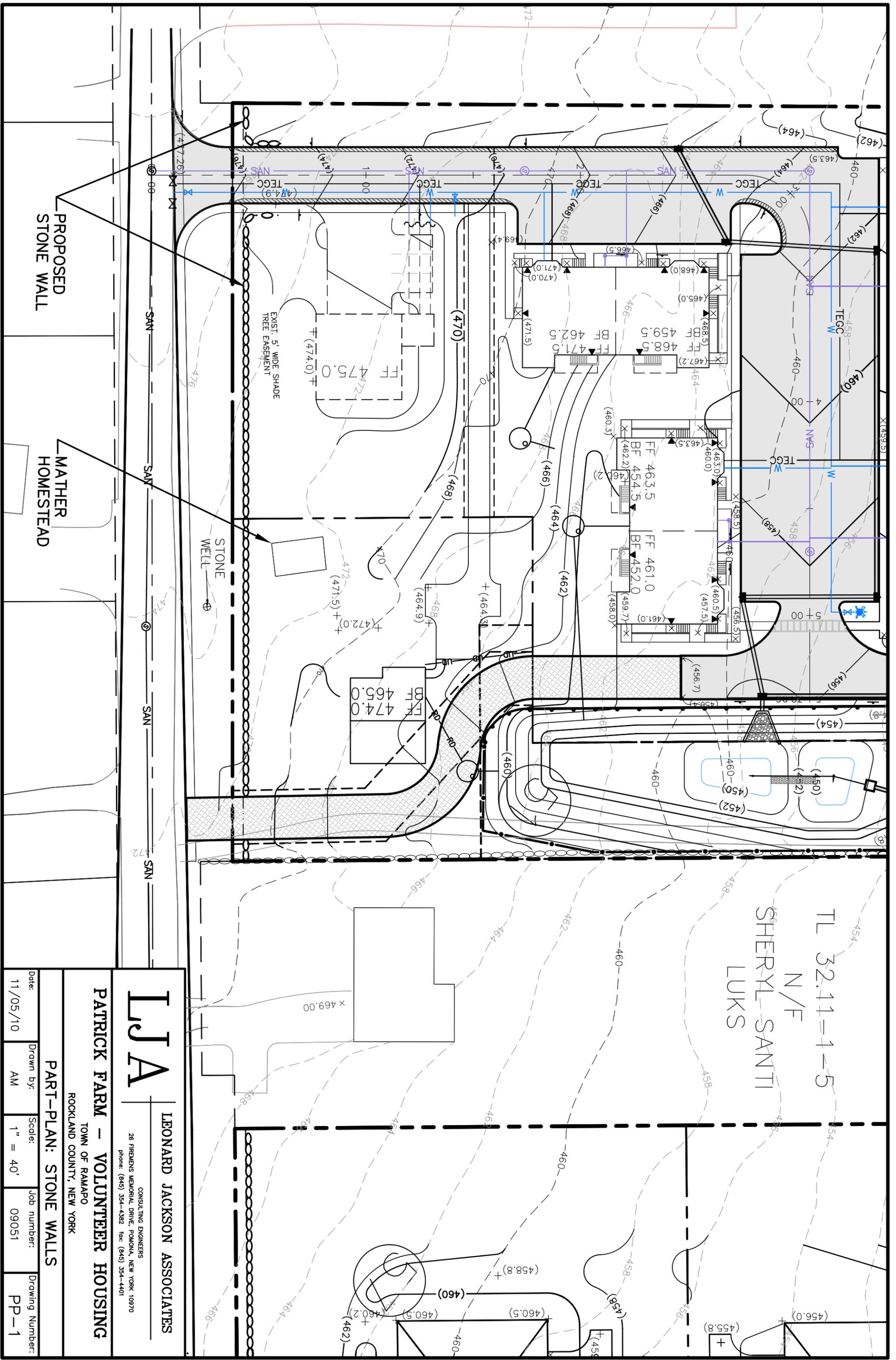
Increased enrollment to the East Ramapo School district can be seen as a beneficial impact as described above. The property tax revenues generated by the project will be more than adequate to cover the projected costs to the East Ramapo School district and are projected to result in a net benefit of more than \$750,000 annually to the school district, thus no mitigation measures are proposed.



Route 202 +405.00

PROPOSED STONE WALL

<p>LJA</p> <p>LEONARD JACKSON ASSOCIATES</p> <p>CONSULTING ENGINEERS</p> <p>26 FRIEDENS MEMORIAL DRIVE, POMONA, NEW YORK 10970</p> <p>phone: (845) 354-4382 fax: (845) 354-4401</p>		<p>PATRICK FARM - SUBDIVISION: LOT #79</p> <p>TOWN OF RAMAPO</p> <p>ROCKLAND COUNTY, NEW YORK</p>	
		<p>PART-PLAN: STONE WALLS</p>	
Date:	Drawn by:	Scale:	Job number:
11/05/10	AM	1" = 40'	09051
Drawing Number:			PP-8



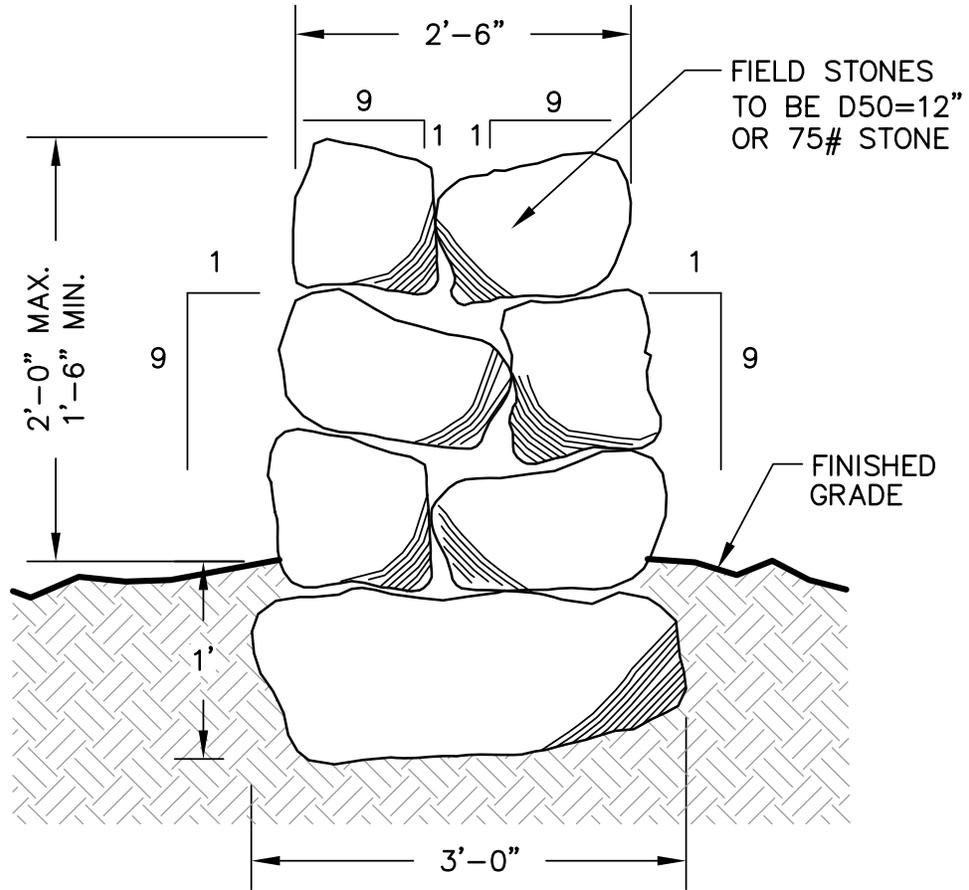
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SHERYL SAN TI
LUKS

LJA
LEONARD JACKSON ASSOCIATES
CONSULTING ENGINEERS
26 FRIEDENS MEMORIAL DRIVE, POMONA, NEW YORK 10970
phone: (845) 354-4382 fax: (845) 354-4401

PATRICK FARM - VOLUNTEER HOUSING
TOWN OF RAMAPO
ROCKLAND COUNTY, NEW YORK

PART-PLAN: STONE WALLS

Date:	11/05/10	Drawn by:	AM	Scale:	1" = 40'	Job number:	09051	Drawing Number:	PP-1
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NOTE: STONES SHALL BE PLACED WITH A 1:9 CANT INWARD TOWARD THE CENTER OF THE WALL.

PATRICK FARM				
TOWN OF RAMAPO ROCKLAND COUNTY, NEW YORK				
FIELD STONE WALL DETAIL				
LJA		LEONARD JACKSON ASSOCIATES		
26 FIREMENS MEMORIAL DRIVE, POMONA, NEW YORK 10970 (845) 354-4382				
Date: 11/05/10	Scale: N.T.S.	Drawn by: AM	Job Number: 09051	Drawing No: 1