1.0 EXECUTIVE SUMMARY

1.1 Introduction

This Draft Environmental Impact Statement (DEIS) has been prepared in response to a Positive Declaration issued by the Village of Monroe Planning Board on July 15, 2002. The Applicant, KDJ Realty Inc., has requested preliminary Site Plan Approval, Conditional Use Authorization, Subdivision Approval, and a Wetland Permit to allow development of a 149 unit multifamily residential project on a 29.3 acre parcel of vacant wooded land located in the Village of Monroe, Orange County, New York. The proposed project is known as Hidden Creek.

The DEIS has been prepared to present and evaluate the potential environmental impacts associated with development of the proposed Hidden Creek Project. This DEIS has been prepared in accordance with the State Environmental Quality Review Act (SEQRA) and Part 617 of the implementing regulations. The contents and format of this DEIS were established in a scoping outline developed by the Applicant and the Village of Monroe Planning Board, acting as the SEQRA lead agency. The Planning Board held a public scoping meeting on April 15, 2002, and adopted a Final Scope for a DEIS on September 12, 2002. The Scope for this document is included in Appendix A.

1.1.1 Project Purpose and Overview

The Applicant proposes a 149-unit multifamily residential project consisting of seven clusters of residential units. The clusters are made up of a combinations of three, four, five and six unit modular buildings along an interior road network. Primary access is from Freeland Street (CR 40), a main thoroughfare in the area. Access is provided via a boulevard style entryway with two twelve-foot lanes and a ten-foot wide median. The boulevard extends for some 225 feet into the site where it forks into a looped center roadway that extends through the property intersecting with a series of smaller loops providing access to clusters of three to six unit modular buildings.

The project is proposed in response to the increasing need and demand for housing in Orange County. The proposed project will provide a moderate residential neighborhood for persons seeking to live in the Village of Monroe, and will produce a modest, sustainable use of land that is currently underutilized.

1.1.2 Description of Proposed Action

The proposed action is a 149 unit residential development, including a private road and appurtenances, on a 29.3 acre parcel in the Village of Monroe. Adjacent and surrounding land use is primarily residential. The project site is located in the UR-M (Urban Multi-Family Residential) zone. Portions of the property adjacent to Ramapo Creek, are located within the Village's Environmentally Sensitive (ES) Overlay Zoning District. The site plan fully conforms with the dimensional requirements of the Village zoning regulations. The site is adjacent to the Ramapo Creek and the Orange County Heritage Trail, which utilizes portions of the abandoned Consolidated Rail Corporation right-of-way. Portions of the 100 year flood plain surround the Ramapo Creek. Two pedestrian bridges are proposed to cross the Ramapo Creek to provide access to the Village's downtown via Clark Street, and to the Orange County Heritage Trail.

The site is largely wooded and contains several federal jurisdictional wetlands. The project will require approval from the U.S. Army Corp of Engineers for the removal of .31 acres of regulated wetland. The project requires Site Plan Approval, Conditional Use Authorization and Subdivision Approval for combining lots 7, 8, 9 and 11.1, from the Village Planning Board. Additionally the project requires several approvals from other agencies. The site is located within the Village of Monroe Water District and the Orange County Sewer District #1. There are currently public water and sewer lines located in proximity to the project site. All units are proposed to be served by the existing central water and sewer facilities.

The project site is predominantly wooded. The proposed project will require removal of slightly less than 14 acres of trees. Pursuant to the Village of Monroe Zoning Code § 200-43, trees greater than 8" diameter breast height have been tagged and identified on the proposed site plan. Accommodation has been made to provide for replacement of the trees removed.

1.1.3 Required Permits and Approvals

The proposed action will require approvals from the following Involved Agencies.

Village of Monroe Village Board	Connection to municipal sewer system Connection to municipal water system
Village of Monroe Planning Board	Lot consolidation Site plan approval Conditional Use Authorization
Orange County Health Department	Water Main Extension
Orange County Department of Public Works	Entrance Permit Sewer Main Extension
Orange County Planning Department	Referral for review per §239 of General Municipal Law (No approval)
NYS Department of Environmental Conservation General Permit	Stormwater Discharge SPDES Sewer Main Extension Water Quality Certification
U.S. Army Corps of Engineers	Nationwide Wetlands Permit #39

1.2 Significant Beneficial and Adverse Impacts

1.2.1 Land Use and Zoning Impacts

The project site is a 29.3-acre parcel of vacant wooded land located on the west side of County Road 40 (Freeland Street) north of Forshee Street. The site is generally surrounded by a combination of single-family residential and vacant land. The land to the north, south and east of the site are single family residential. Land parcels to the northwest of the project site are vacant. The project site is located in close proximity to the Village business district. It is also situated to take advantage of the commercial development located along Route 17M.

Compatibility with Village Zoning Code

Construction of the proposed Hidden Creek multifamily residential project is permitted as a conditional use in the UR-M zoning district. The Hidden Creek project has been designed by the project engineer to meet all of the specifications of the conditional use requirements. The buildable acreage of the property, after subtracting lands based upon environmental constraints, is 20.5 acres. Under the Village Code for multifamily residences, the maximum density of one-bedroom units is 8 units per acre and the maximum density of two-bedroom units is 7 units per acre. The proposed project will consist of 44 one-bedroom units (requiring 5.5 acres) and 105 two-bedroom units (requiring 15.0 acres). In compliance with the Village Code, the net acreage required (20.5 acres) equals the net acreage available. No setback or other variances will be required for the construction of the townhouse units.

Conditional Use Requirements

Under the Village of Monroe Table of Use requirements for the UR-M District, multifamily residential is listed as a conditional use, providing municipal water and sewers are available. Conditional uses are subject to the general guiding principles and standards for site plan approval. Water and sewer facilities already exist in the immediate project vicinity. The conditional use requirements for Multifamily Residential Units are detailed in §200-63 of the Village Zoning Code. It is the purpose of §200-63 to provide an opportunity for the creation of Multifamily Units designed to serve the present and future housing needs of those persons living and working in the Village of Monroe, including both elderly and young households, families of moderate income, small families and other households who may need or desire, for whatever reason, to live in multifamily housing.

Environmentally Sensitive (ES) Overlay District

Portions of the project site lie within the Environmentally Sensitive (ES) Overlay District. All uses normally permitted in the underlying zones are permitted within the ES overlay district, as a conditional or accessory use subject to meeting requirements of other regulations of the Village of Monroe and other regulatory agencies as appropriate. The project has been designed to avoid the flood plain, wetland areas and steep slope disturbance to the greatest extent practicable and preserves large portions of the perimeter in natural woodland cover.

Compatibility with Village Development Plan

The density of the proposed project meets the zoning requirements of the UR-M district. As discussed in DEIS, overall disturbance to the project site is proposed to involve approximately 59 percent of the site, of which approximately 51 percent would be returned to a landscaped condition. Thus, the applicant believes that the proposed project is compatible with the land use objectives for the Village of Monroe.

Compatibility with Regional Plans

The proposed project is a multi-family residential townhouse development and is generally compatible with and supportive of the land use goals and policies established in the Village of Monroe Master Plan, the Town of Monroe Master Plan, the Orange County Comprehensive Development Plan, and the Monroe Woodbury Harriman Comprehensive Development Plan. The proposed project is located in close proximity to the junctions of routes Interstate 87, State Route 17 and State Route 17M. Development throughout Orange County tends to be concentrated along these transportation corridors, surrounded by large areas of undeveloped land. Goals for land use development in the area are guided by an Urban/Rural concept whereby development is encouraged in the built up or urban areas, which have municipal services ie. water & sewers. Thus leaving the undeveloped areas in the region to preserve the area's open space and park like setting with numerous lakes, streams, hills meadows and wooded areas, that are critical to the future of the region. Goals for the Village of Monroe call for a continued emphasis on the residential nature of the Village, providing variety in the types and pricing of housing options available.

1.2.2 Soils and Topography Impacts

Generally, the soils consist of deep, moderately well drained and somewhat poorly drained, medium textured soils on gently sloping uplands. The soils adjacent to Ramapo Creek near the northern extent of the property are derived from recent alluvial deposits and are poorly to very poorly drained.

Approximately 17.3 acres, or 59 percent of the site, must be disturbed to accommodate the proposed development. Grading is required to build the internal road network, install site utilities and prepare level areas for the multifamily residential units. Unavoidable short term impacts will result due to the presence of construction vehicles on the site and on surrounding roads. The proposed plan has been designed so that large areas within the buffer zones of the site's wetland and stream features would not be disturbed.

The project engineer estimates that a surplus of approximately 1700 cubic yards of earth materials will be generated as a result of the proposed project. This 1700 cubic yards of excess cut material will be utilized on site. Based upon the on site soil conditions, it is anticipated that the fill material for the construction of the roadway will be imported onto the site.

Overall, the site contains a gently to moderately sloping topography that is characteristic of an out wash terrace landscape. Except for a small portion of the property in the very southwestern end, most of the site slopes to the north towards Ramapo Creek. Elevations above mean sea level

range from approximately 656 feet at a low point along Ramapo Creek to approximately 716 feet in the southeast corner of the site. Topography varies approximately 60 feet across the site.

The Village generally defines steep slopes as those areas of 15 percent and greater slopes. The project will result in the disturbance of approximately 1.02 acres with slopes greater than 15 percent.

Potential Soil Erosion

The greatest potential impact associated with this project relative to soils would be from erosion and sedimentation during construction. As a result of vegetation removal and soil disturbance, there is an increased potential for siltation to occur in areas downgradient of the subject site. The areas most susceptible to erosion include steep slopes as these features tend to promote the formation of channeled surface flow and increased runoff velocity. High velocity runoff may lead to erosion in soils devoid of vegetation, as would be the case during the construction phase of this project. The potential for soil erosion and siltation will be minimized during project construction by adhering to the proposed Soil Erosion and Sediment Control Plan.

Due to the relatively level topography and absence of rock outcrops on the project site, no blasting is anticipated for the construction of the project.

1.2.3 Surface Water Resource Impacts

Upon completion of the Hidden Creek project, approximately 8.51 acres of this 29.3 acre site would become impervious. These impervious surfaces are associated with the proposed buildings, parking areas, and road network. This change in the perviousness of the site will result in increases in both the rate and volume of runoff generated by this site. If not properly mitigated, this increased runoff could cause erosion of the stream channel and flooding to downstream areas. Prolonged and substantial alterations to the volume of runoff can change the hydrology of associated wetlands and flood plain areas.

Due to the sensitive nature of the site's surface water resources, the applicant has proposed a series of storm water and pollution control measures for the Hidden Creek development. These various measures were designed to prevent potential impacts to on-site and downstream water resources by allowing for the extended detention and treatment of runoff. Such treatment would remove the required amount of sediments, nutrients and other chemicals to allow for the discharge into Ramapo Creek.

The proposed Hidden Creek project will not impact any areas within the 100 year flood plain of the Ramapo Creek. The proposed Stormwater Management Plan provides a net zero increase in the stormwater runoff rates for the 1,2, 10, 25, 50 and 100 year storm events. No downstream flooding-related impacts are expected to result from the proposed development. No significant short- or long-term effects to on-site or off-site hydrology are anticipated.

Groundwater

This proposed Hidden Creek Project and the surrounding area of the Village of Monroe is located within the Monroe Water District and is served by municipal water. Municipal water from the

Monroe Water District is proposed to be used for this project. None of the nearby residential properties obtain water from wells.

The project site would result in 8.51 acres of impervious surfaces on the project site for roads, driveways and houses. The overall groundwater recharge abilities of the site is not expected to be significantly affected since first flush runoff from the impervious surfaces would be conveyed to facilities such as dry wells, infiltrators or a water quality basins that are designed to recharge groundwater supplies. Therefore, the proposed development is not expected to result in a significant adverse impact to groundwater resources.

1.2.4 Terrestrial and Equatic Ecology Impacts

It is estimated that a total of 17.3 acres of the Hidden Creek site would be disturbed as a result of this project, leaving approximately 12 acres or 41 percent of the site undisturbed.

Table 1-1 gives the area and relative percent of each of the various vegetation/habitat types found at the Hidden Creek site for both the existing and proposed conditions. Approximately 13.61 acres of upland forest habitat would be disturbed leaving 6.31 acres to serve as upland open space and habitat under the proposed plan. Regulated wetland habitat at the Hidden Creek site would be reduced from 4.56 acres to 4.25 acres after construction, a reduction of .31 acres.

Upon completion of the Hidden Creek development, lawn and landscaped areas will have increased from 2.27 acres to a total of 8.89 acres. Impervious surfaces such as buildings, roads, and parking areas would occupy 29 percent of the Hidden Creek site according to the current proposal. While the lawn and landscaped areas may have a limited value as wildlife habitat, the areas of impervious surfaces would no longer function as wildlife habitat or be available for wildlife use.

Table 1-1
Approximate Site Coverage: Existing and Proposed (in Acres)

Land Cover	Existing	Proposed	Change
Upland/Woodlands	19.92	6.31	-13.61
Wetlands/Woodlands	4.56	4.25	-0.31
Scrub-shrub	1.04	0.24	-0.80
Lawn and Landscaping	2.27	8.89	6.62
Stream	0.78	0.78	0.00
Detention ponds	0.00	0.19	0.19
Impervious surfaces*	0.28	8.51	8.23
Dirt Roads & Foot Trails	0.45	0.13	-0.32

Source: Pietrzak & Pfau Engineering Consultants, PLLC 2002.
* includes existing roads, driveways and buildings
** Total Area to remain undisturbed, 12.0 acres

No federal or state listed rare, threatened, or endangered plant species were identified on the site by the New York State Department of Conservation. Furthermore, no unique, rare, threatened, or endangered plant species were observed during visits to the project site by biologists from Tim Miller Associates.

In accordance with the Village of Monroe's Zoning Code §200-43, a tree survey was conducted on the Hidden Creek property. This tree survey identified the location, diameter, and species of trees greater than eight inches in diameter, as measured four feet above grade. A total of 1017 trees were surveyed at the Hidden Creek site. A total of 706 'regulated' trees will need to be removed to accommodate the Hidden Creek development. The attached Landscape Plan provides 709 replacement trees to compensate for the trees removed.

The New York State DEC Natural Heritage Program indicates that there are no known occurrences of protected or rare wildlife species on the project property or adjacent properties. No rare, threatened, or endangered species were observed on the site during recent field visits by biologists from Tim Miller Associates.

According to New York State DEC Region 3, no fish surveys have yet been conducted on the Ramapo Creek or any other headwater tributary of the Ramapo River. No other public or private organization is known to have conducted fish surveys in the vicinity of the Village of Monroe. Due to the lack of existing data on the fishery resources of the area, Ramapo Creek's physical habitat characteristics, watershed position, and landscape condition were used to predict the fish species that may potentially utilize this stream system. At most, Ramapo Creek may support a warmer water fishery composed of the resident and migratory species.

Wetlands

The project would impact approximately .31 acres of the existing 4.56 acres of regulated wetlands in seven areas. All wetland areas are entirely internal to the site. Based upon their location, the 0.31 acres of wetland impacts associated with the proposed development are not expected to result in off-site impacts. Potential Wetland Mitigation Areas have been identified which total .36 acres.

1.2.5 Aesthetic Resource Impacts

Orange County Heritage Trail

The Orange County Heritage Trail borders the project site on its north side. This trailway follows a former railroad bed and consists of a gravel path that is notably overgrown with herbaceous and shrubby vegetation. At the present time, this trail is primarily a walking trail due to the rough gravel surface. From the Heritage Trail, views into the project site extend approximately 100 to 250 feet, depending on the viewer position. Due to the density of the existing under story vegetation, potential views of the Creek are largely obscured. Views deeper into the site than the Creek are obscured by the vegetation.

The Orange County Heritage Trail is the only documented aesthetic resource that was identified in the immediate vicinity of the project site. No significant change in the visual character of the Trail corridor is anticipated to result from implementation of the proposed project.

Community Appearance

The Village of Monroe Zoning code cites that excessive uniformity, dissimilarity, or inappropriateness of building design may adversely affect the immediate area and neighboring areas. It is the purpose of the Code to prevent harmful effects of such exterior appearance of

new or altered buildings and thus encourage the most appropriate use of land within the Village of Monroe.

The project has been laid out with building clusters centered around the access roadway and separated from each other by intervening landscape features (e.g., contours, preserved existing woods or wetlands, or planted buffers). Seven building clusters are proposed around a central main access road. A central recreation complex is proposed for the residents.

The buildings will be designed in earthtone colors with varied roof lines and roof peaks, a combination of brick and vinyl siding, uncluttered window and door treatments, and uniform style chimneys as an architectural accent. The proposed design for Hidden Creek development is intended to provide a variety of residential settings by use of a curvilinear roadway pattern and building layout, clustered buildings to create small neighborhoods, and preservation of significant natural areas. The landscape setting envisioned for the residential buildings will be carried into the proposed recreation area facilities and the main entrance area to provide uniformity in design. The proposed project will not result in excessive similarity, excessive dissimilarity, or inappropriateness of buildings or land development.

Visual Resources

While proposed development of the property will cause the removal of vegetation and construction of buildings, no significant adverse change to the appearance of the property is anticipated as viewed from local roads and places of public access.

1.2.6 Historic And Archeological Resource Impacts

The New York State Office of Parks, Recreation, and Historic Preservation (OPRHP) recommended a Stage 1A Literature Review and Sensitivity Analysis be conducted on the area within and adjacent to the project site due to the potential for an archaeological site to be present in or adjacent to the project area. A Stage 1A Literature Review and Sensitivity Analysis was conducted in November 2002 followed by a Stage 1B study. The results of this review indicated that:

- No historic sites or structures listed on the State Register were identified by OPRHP in the immediate vicinity or vicinity of the proposed project area.

- No sites or structures listed on the National Register were identified by OPRHP in the immediate vicinity or vicinity of the proposed project area.

- The Turner Farmhouse and Barn, located off the project site, but in the vicinity of the project, has been identified as being potentially eligible for inclusion in the National Register of Historic Places. Measures have been taken to provide screening for the Turner Farm House and Barn.
- No additional structures currently under consideration for the State/National Register are known to be located adjacent to or in the vicinity of the project area

A Stage 1B Archeological Field Survey was conducted on November 30, December 1 and December 8, 2002 to investigate those areas on the site which were are deemed suitable for prehistoric occupation. The approximately 29 acre site was blanketed with over 100 shovel test pits in all areas identified as suitable for subsurface testing. During the field survey several

pieces of chert debitage were recovered. Cardinal points at 10 foot intervals were dug for each of these positive tests. None of the cardinal points yielded prehistoric material.

Environmental conditions on the site suggested the potential of the project area to contain prehistoric sites. Several positive shovel tests were dug. The area all around the positive shovel tests was tested to rule out the presence of significant sites within the project area. No significant sites were identified. Based upon the results of the Stage 1B Field Survey, no further archaeological investigation was recommended for the project site.

In a letter dated February 28, 2003 the New York State Office of Parks, Recreation and Historic Preservation stated " Our office has no further concerns regarding archeology and this project: additional survey for this project is **not** warranted. A copy of this letter can be found in Appendix D, Archeological Assessment. A subsequent letter dated September 23, 2003 reiterated " ...the OPRHP has no further concerns regarding this project." A copy of this letter can also be found in Appendix D.

1.2.7 Community Services and Utility Impacts

Education Facilities

The maximum number of students projected to enroll in the Monroe Woodbury School District from the proposed development would be 21 or 0.3 percent of the total number of students (7090) enrolled in the District in the 2001-2002 school year. This assumes that all the homes at the proposed Hidden Creek project are built and occupied in one year.

According to information provided by the School District, enrollments have been increasing in the District since 1990. The construction of a 22-classroom addition to the middle school was just completed and has brought long needed relief to the significant overcrowding in grades 6-8. The district continues to await final plan approval from the State Education Department in order to begin construction on the completion of the fourth level of the high school in order to accommodate the projected enrollment for grades 9-12.

Since not all of the proposed residences will be constructed and occupied at the same time, the projected student population from the proposed residences will be introduced into the School District over a multi-year period (2003-2005). It is also likely that the 21 school aged children projected to reside in this development and attend public schools would not be in the same grade level.

Police Protection

The project site is within the jurisdiction of the New York State Police and the Village of Monroe Police Department. Based on planning standards contained in the Development Impact Assessment Handbook published by the Urban Land Institute (1994), two police personnel should be provided per 1,000 persons. Using this standard, the increase of 261 persons projected to reside in this residential complex has the potential to increase police staffing needs by approximately one half of a staff person.

Fire Protection

The Monroe Fire Department/Mombasha Fire Company provides fire protection to the project area. Based on planning standards contained in the Development Impact Assessment Handbook published by the Urban Land Institute (1994), 1.65 fire personnel should be provided per 1,000 population. Using this standard, the projected increase of 261 persons has the potential to increase fire protection staff by about half of a staff person.

Ambulance Service

The Monroe Volunteer Ambulance Corp provides emergency ambulance service to the project area. Based on planning standards contained in the Development Impact Assessment Handbook published by the Urban Land Institute (1994), 1.65 personnel should be provided per 1,000 population. Using this standard, the projected increase of 261 persons has the potential to increase fire protection staff by about half of a staff person.

Hospital Impacts

Based on planning standards contained in the Development Impact Assessment Handbook published by the Urban Land Institute (1994), four (4.0) hospital beds should be provided per 1,000 persons. Based on this standard, the projected population increase associated with the Hidden Creek Estates has the potential to increase the need for beds in hospitals serving the Orange County area by approximately 1 bed.

Public Water Supply

The project site is currently served by public water supply lines which uses Mombasha Lake as a source of water. Water supply to the project site is proposed to be provided by the Village of Monroe Water District. The proposed Hidden Creek project will create an additional need of 19,575 gallons of water per day. This demand represents approximately 2 percent of the 1.0 million gallons per day currently supplied by the Village of Monroe Water District to its service area.

The project will provide an extension of the eight inch water main located under Freeland Street. Upon completion water and sewer facilities will be offered to the Village for dedication.

Sewage Disposal

The project will be sewered by an existing sewer main running through the northern portion of the site. The existing sewer main is located within the existing 15 feet wide sanitary easements. Sewer connection locations were developed in an effort to achieve a complete gravity flow system to service all the units.

The sanitary sewage flow from the site is proposed to go to the Orange County Sewer Treatment Plant via the existing sewer infrastructure. The design capacity of this plant is 3.8 million gallons per day. Based on 65 gallons of sewage production per day per capita, a total of 16,695 gallons of sewage is projected to be generated from the proposed development. The existing treatment plant has enough capacity to handle this increase in flow.

1.2.8 Transportation Impacts

The proposed project is expected to generate a total of 66 trips during the AM peak traffic hour and 80 trips during the PM peak hour. All of the site generated traffic will utilize the proposed access roads onto Freeland Street.

The intersections studied are listed below:

- Route 17M/Freeland Street/Still Road - signalized
- Route 17 M/Entrance to K-Mart Shopping Center - signalized
- Freeland Street /Spring Street (CR 105) - undergoing signalization
- Freeland Street/Half Hollow Turn - unsignalized
- Freeland Street/Forshee Street - unsignalized
- CR 105/Larkin Road - signalized
- CR 105/Route 208 - signalized

The projected levels-of-service at the study intersections for the Build condition are shown in Table 1-2. Level-of-service A indicates the most efficient operation, and level-of-service F the lowest level of operation for a particular intersection. The analysis found that under Existing Conditions each of the signalized intersections studied had movements with a level of service E or F, with the execption of County Road 105 & Larkin Road. In addition the eastbound movement at the Freeland Street / Spring Street intersection operates at level of service E during the AM peak hour and F during the PM peak hour. These conditions are exacerbated in the No-Build and Build Condition.

The intersection of County Road 105 and Larkin Road is a LOS “B” under existing conditions, but declines to an overall LOS “D” during the PM peak hour under future No-Build Conditions and future Build Conditions, with the southbound left turns at LOS “E” and “F” under the No-Build And Build conditions respectively.

Orange County is in the process of reconfiguring the intersection of Freeland Street and Spring Street (CR 105) and installing a new traffic signal to improve traffic flow and safety. It is anticipated that this intersection will operate at a level of service C or better once all the improvements are complete.

The intersection of County Road 105 / Larkin Drive would require mitigation measures for the evening peak hour.

Half Hollow Road westbound can be expected to decline to a LOS “E” during the PM peak hour.

The Route 208 / Main Street intersection is currently failing and would continue to fail in the future. As discussed in the Traffic Impact Study, should NYS DOT plan to improve this intersection the applicant is willing to contribute a proportional fair share of the improvement costs.

Mitigation measures to address these issues are discussed in the Traffic Imapct Study and include signal timing modifications and consideration of a new traffic signal at the intersection of Freeland Street and Half Hollow Road.

A summary of the projected levels-of-service at the study intersections for the Build condition with mitigations is shown in Table 3.8-11.

TABLE 1-2
Build Conditions, Signalized Intersections
Level of Service Summary

Intersection Roads	Lane Group (Approach Direction -Movement)	AM Weekday Peak Hour			PM Weekday Peak Hour		
		Volume to Capacity Ratio	Delay seconds/ vehicle	Level of Service	Volume to Capacity Ratio	Delay seconds/ vehicle	Level of Service
Rt 17M/Freeland St/Still Rd							
Route 17M	EB-L	0.16	19.7	B	0.39	31.4	C
	EB-TR	0.82	46.4	D	0.98	68.9	E
	WB-L	0.15	31.2	C	0.35	32.4	C
	WB-T	0.35	30.5	C	0.90	52.2	D
	WB-R	0.06	15.5	B	0.21	13.0	B
Still Road	NB-L	0.27	29.8	C	0.54	43.5	D
	NB-TR	0.91	67.2	E	0.88	61.8	E
Freeland Street	SB-L	0.30	37.6	D	0.25	38.2	D
	SB-TR	0.61	42.7	D	0.94	73.8	E
Total			44.1	D		54.9	D
County Road 105/Larkin Dr							
Larkin Dr	WB-L	0.55	23.8	C	0.38	21.6	C
	WB-R	0.35	21.5	C	0.38	21.7	C
County Rd 105	NB-T	0.67	7.5	A	0.70	6.7	A
	NB-R	0.10	0.0	A	0.14	0.0	A
	SB-LT	0.42	4.9	A	1.14	85.9	F*
Total			8.7	A		45.2	D
Route 208/Main Street							
Route 208	EB-LTR	1.36	>120.0	F	1.27	>120	F
Main St	WB-LTR	1.04	111.0	F	1.79	>120	F
Route 208	NB-LTR	0.89	33.7	C	0.98	50.7	D
Forest St	SB-LTR	1.33	>120.0	F	0.65	49.8	D
Total			116.3	F		>120	F
Route 17M/K-Mart/Vista Ln							
Route 17M	EB-L	0.01	3.4	A	0.00	0.0	A
	EB-TR	0.52	10.9	B	0.68	13.8	B
	WB-L	0.05	6.3	A	0.29	13.0	B
	WB-T	0.28	8.8	A	0.67	13.4	B
K-Mart Drive	NB-LT	0.24	34.0	C	0.90	76.8	E
	NB-R	0.13	22.1	C	0.27	24.0	C
Vista Lane	SB-LTR	0.04	31.6	C	0.04	31.6	C
Total			11.8	B		19.5	B

Level of Service (see page 5 in the Traffic Report, Appendix B for level of service criteria).

NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound
L = left, R = right, T = through, TR = through and right, (e.g. WB-L = Westbound left).

* Denotes a decline in the Level of service from the No-Build Condition

1.2.9 Noise and Air Resource Impacts

Short term construction related impacts from the proposed project include fugitive dust and particulate matter from the project site work operations, emissions from construction equipment and vehicles, and construction-related noise. The heaviest construction work is expected to occur at the beginning of the construction period as site clearing and rough grading is conducted and when paving and building materials are transported to the site. Well maintained vehicles and efficient operations help to reduce these temporary emissions. Dust will be controlled during dry periods as necessary to minimize off-site transport of dust.

No long-term air quality or noise impacts are expected to result from the proposed project.

1.2.10 Community Character Impacts

An assessment was conducted of the character of existing residential neighborhoods in the vicinity of the project site. This in-field analysis extended to the immediate vicinity of the site, encompassing all properties within 500 feet of the subject property boundary. In addition, three multi-family development projects in the Village were also assessed.

Particular attention was paid to *streetscape design* (road widths, sidewalks, street trees, street lighting, pedestrian amenities, build-to line, roadway interconnections, on-street parking), *site layout* (orientation of residences to the street, front yard setbacks, location of garages, location of off-street parking), and *architecture* (architectural details, pedestrian or automobile orientation, uniformity or variety of design between buildings on the street).

The neighborhood that immediately surrounds the project site displays a variety of housing styles and settings that is considered typical of suburban single family development in the region. This is particularly noticeable as relates to the variety of ages of homes in the site vicinity, where in-fill of newer houses contrasts significantly with the older house sites. None of the surrounding neighborhood is indicative of a streetscape experience that provides a sense of uniformity in style and character, along with a variety of architectural and landscape details, thereby providing a prototype for new development on the subject site.

The three existing multi-family developments assessed in the Village of Monroe display housing styles and settings that demonstrate a range of development types possible. Each project has a unique character with numerous contributing factors that each affect its overall visual character. Given the general size of multi-family buildings, extensive land clearing and reconfiguration of the land is often necessary to accommodate such development. The position of the project components within the natural landscape therefore plays a large role in the visual appearance of the built project, both from within and from off-site locations.

The Hidden Creek development is envisioned to be a unique addition to the Village that will address significant housing needs in the region and will complement the other pre-existing uses in the area. This project is not expected to have an adverse effect on the established character of the immediate area or neighboring areas of the community as a result of its design features, character (style), or form of architecture.

1.2.11 Fiscal Resource Impacts

The addition of 261 people, projected to reside at Hidden Creek, to the Village's population represents less than a 3.4 percent increase over the 2000 recorded population (7,780). The addition of the residents from the Hidden Creek project is not anticipated to produce any potentially adverse demographic effects.

The projection of future taxes for the proposed development is based on the average selling prices of the units. The proposed residential development will have 149 multifamily residential townhouse style (2-bedroom) homes with 105 units having an estimated sales price of $225,000 and 44 units to be sold at an estimated $175,000.

The following table provides a summary of the taxes generated by the property at this time and compares these to a projection of taxes under the proposed development scenario.

Table 1-3
Current & Projected Taxes Generated by Project Site

Taxing Authority	Tax Rate [1]	Current Taxes ($)	Projected Taxes - Total ($)	Difference Between Current & Projected Taxes ($)
Orange County**	$11.26	$1,937	$83,435	$81,498
Town of Monroe**	$5.52	$950	$40,910	$39,960
Village of Monroe	$18.07	$3,130	$133,926	$130,796
Monroe Refuse** [2]	$1.034/unit	$414	[3]	($414) [3]
OC Sewer Dist. 1 - Usage/O & M	$330.28 [4]	N/A	$49,212	$49,212
OC Sewer Dist. 1 (Bonding)	$0.8649	N/A	$6,410	$6,410
OC Sewer Dist. 1 (Laterals)	$0.5247	N/A	$3,889	$3,889
Monroe Village Water [5]	$2.80/$3.40 per 1,000 g/qrtr.	$134	$24,230	$24,096
Monroe-Woodbury Central Schools	$81.89	$14,093	$606,924	$592,831
TOTAL		**$20,658**	**$948,936**	**$928,278**

Notes:
** - Existing taxes based on current AV and tax rate; information from the Town and Village of Monroe was incomplete. Such records must be requested from the Orange County Commissioner of Finance for a fee of $25/lot.
[1] - Tax Rate per $1,000 of Assessed Valuation, unless otherwise noted.
[2]-SF & Townhomes=200 refuse units/home;rate is per unit or $1.0344 x 200 per home or approximately $207/residence.
[3] -Condominiums and commercial development are not eligible for Town Pick-up - private carters must be contracted.
[4] - Rate is per residential unit (i.e. SF residence, condo, townhouse); users are billed $165.14 every six months.
[5]- Rate is $2.80/1,000 gallons/quarter up to 30,000 gallons; beyond 30,000 gallons the rate is $3.40/1,000 gallons/quarter. Current taxes derived from current water bill.

1.3 Proposed Mitigation Measures

1.3.1 Land Use and Zoning

The overall pattern of residential development in Monroe is already established with moderate residential dwelling densities prevailing. The proposed intensity of use of the project site is in line with surrounding residential areas. The proposed project has been designed to conform in all aspects with the UR-M zoning of the project site.

Land use of the site will change from mostly vacant with a single family residence, to a developed multifamily residential project. No other land use impacts have been identified that would result from implementation of the proposed development. The proposed plan for multifamily residential housing has been designed to complement the surrounding development, and to address the housing needs of the area. This project will conform with the site's zoning. Therefore, no mitigation measures are needed or proposed in relation to land use.

1.3.2 Soils and Topography

The potential for soil erosion and siltation will be minimized during project construction by adhering to the proposed Soil Erosion and Sediment Control Plan. Given that more than 23 acres of this 29.3 acre site have slopes that are less than 10 percent, impacts from this development to steep slopes are expected to be minimal on a total area basis.

In order to insure a road bed of the highest quality, the material for the roadbed will be imported onto the site. Current plans show a minor surplus of approximately 1700 cubic yards of material will be generated as a result of the proposed project. It is anticipated that cut material will be utilized on site, thereby making the export of fill material unnecessary.

With the implementation of the Soil Erosion and Sediment Control Plan this project will have no significant effect on soils or topography. Therefore, no further mitigation measures are proposed

1.3.3 Surface Water Resources

Floodplains and Downstream Flooding

The proposed stormwater management plan will maintain stormwater runoff rates for the 1 through 100 year storm events to pre-development levels at all drainage area design points. Therefore, no downstream flooding-related impacts are expected to result from the proposed development.

The proposed action will result in the alteration of approximately 17.3 acres of land. Since the area of site disturbance exceeds one acre, stormwater management plans must be in compliance with the SPDES General Permit for Storm Water Discharges from Construction Activities. This permit is administered by the NYS DEC.

Construction Phase

The greatest potential impact to water resources associated with this project during the construction phase would be from erosion and sedimentation. An Erosion Control plan is provided as part

of this DEIS. The primary aim of this plan is to reduce soil erosion from areas exposed during construction and prevent silt from reaching the on-site wetlands and areas downstream. All soil erosion and sedimentation control practices have been designed according to the New York State Department of Environmental Conservation Stormwater Management Design Manual.

A number of Best Management Practices were chosen to help mitigate against possible erosion impacts during construction. These measures include, seeding to stabilize slopes, temporary diversion swales, sediment traps, and filter fabric silt fencing.

By employing these various erosion control practices in conjunction with one another, the potential adverse impacts associated with the sedimentation of the site's surface water resources during project construction would be minimized to the greatest extent possible. No further mitigation measures are proposed.

Post Construction

Following construction, erosion and pollution control will be provided by the established vegetation and the permanent storm water management devices as outlined. The principal stormwater and pollution control device would be two detention ponds constructed to capture and treat flows in the north-central portion of the site. Runoff would be detained in the pools and treated through settling and biological uptake mechanisms. After treatment, Stormwater would discharge from the second pond into Ramapo Creek via a single control structure.

The project has been designed to provide for a zero net increase in runoff for the 1,2, 10, 25, 50, and 100 year design storms. Such control of runoff should significantly avoid potential erosion and channel entrenchment impacts to Ramapo Creek.

1.3.4 Terrestrial and Aquatic Ecology

Grading and site disturbance from installation of roads and utilities, and construction of homes, has been restricted to the greatest extent possible. The existing vegetation will be maintained as near to new buildings and site features as possible as shown on the plans. However the development of the site with a multifamily density will have the impact of requiring the removal of a significant number of trees. A total of 706 'regulated' trees will need to be removed to accommodate the Hidden Creek development. Of this amount, 9 are large trees greater than 24 inches dbh.

To mitigate against the potential impacts associated with such tree removal, the applicant has prepared a Landscape Plan. This plan has been developed to provide for the replacement of trees removed during construction with a like number of newly planted trees, as far as is practical. The landscaping plan also aims to provide additional landscaping to better ensure that the development blends with the neighboring environment. Such landscaping will screen new roads and parking areas and help cut noise impacts from internal traffic. The Landscaping Plan provides for a buffer to screen the proposed project, retaining the natural character of the Orange County Trailway.

The applicant proposes to plant a total of 709 new trees on the project site upon completion of the development. It is believed that the number, location, and species composition of these trees

and landscape plantings will successfully mitigate the various environmental impacts associated with the initial clearing.

Since no protected wildlife or plant species have been identified or observed on the project site, no direct impacts to Terrestrial and Aquatic Ecology as a result of the Hidden Creek project are anticipated. Furthermore, indirect impacts to rare, threatened, or endangered species located off-site are also not likely as no listed species have been identified in the landscape immediately surrounding the subject site. Since no impacts are anticipated, no further mitigation measures are proposed.

Wetlands

The greatest potential for indirect wetland impact associated with this project would be from erosion and sedimentation during construction. An Erosion Control plan has been developed by the project engineers to help mitigate this potential impact to the greatest extent practicable while achieving the proposed site plan.

1.3.5 Aesthetic Resources

A buffer of existing woods vegetation has been retained around the entire perimeter of the project. This buffer will serve the existing residences neighboring the project site, the proposed residences, as well as preserve sensitive natural resources along Ramapo Creek and the on-site wetlands. This buffer will also provide screening to the Orange County Trailway.

The project has been laid out with building clusters centered around the access roadway and separated from each other by intervening landscape features (e.g., contours, preserved existing woods or wetlands, or planted buffers). The buildings will be designed in a variety of earth tone colors with varied rooflines and roof peaks, a combination of brick and vinyl siding, uncluttered window and door treatments, and uniform style chimneys as an architectural accent. The proposed design for Hidden Creek development is intended to provide a variety of residential settings by use of a curvilinear roadway pattern and building layout, clustered buildings to create small neighborhoods, and preservation of significant natural areas. These measures should insure diversity in the aesthetic appearance of the project.

1.3.6 Historic And Archeological Resources

As there are no known or documented historic or prehistoric resources within the project site, thus no impacts to be mitigated. In the event that prehistoric cultural resources are found on the project site that would be impacted by the project, appropriate mitigation measures would be taken in accordance with applicable local, state and federal regulations.

1.3.7 Community Facilities

Schools

The proposed residences are expected to be constructed and sold over a multi-year period. The project will generate substantial revenues to the School District which may be used to supplement staff or operation expenses. The development of this project over several years will allow for the additional students to be introduced to the local schools gradually. In addition, the upgrades to

the district facilities discussed above will help alleviate increased enrollment in the district. No further mitigation is anticipated.

Municipal Services

The proposed project is projected to produce municipal tax revenues that are approximately 43 times the current taxes. This additional revenue can be used to offset any increase in municipal expenditures.

Solid Waste

The project is proposed as residential multifamily condominiums. As such the project will be excluded from solid waste pick up and disposal by the Town of Monroe, which provides refuse pick-up for the Village. Private carters will be contracted by the Homeowners Association to provide refuse collection.

Sewage Disposal

When the proposed project is developed, it is estimated that the projected taxes to the Moodna Orange County Sewer District will be $10,299. These funds will be used for the operation and maintenance of the facilities.

1.3.8 Transportation

Intersection improvements directly attributable to this project are the change in signal timing of the County Road 105/Larkin Drive intersection. The existing cycle length of 60 seconds should be increased to a 70 second cycle length. The intersection is controlled by Orange County, therefore any modification to signal timing would need approval by the County.

As discussed in the Traffic Impact Study, the Half Hollow Road approach to Freeland Street will decline to a LOS "E" during the PM peak hour. A traffic signal warrant analysis was conducted to determine the feasibility of installing a traffic signal at this location. The analysis will be sent to Orange County Department of Public Works for review. Upon approval of construction of a signal at this location, the applicant is willing to fund the capital and installation costs of the signal. The projected level of service at this intersection, if a new semi-actuated traffic signal was to be installed with a 60 second cycle length, the AM peak hour LOS could be expected to be a LOS "A" and the PM peak hour could be expected to be a LOS "B".

The Orange County Department of Public Works is in the process of improving the geometry and providing for signalization of the intersection of Freeland Street and Spring Street (CR105). After these improvements are made, the northbound approach would change from a LOS "D" in the No-Build Condition to a LOS "E" in the Build Condition during the PM peak hour. Mitigating the problem will require shifting one second of green time from Spring Street approach and adding it to the Freeland Street approach. The cycle length will remain the same. With this change the LOS will improve to "D".

Improvements to the intersection of Route 208 and North Main street can only be made by widening the approaches, should NYS DOT plan to improve this intersection the applicant is willing to contribute a proportional fair share of the improvement cost.

1.3.9 Noise and Air Resources

Methods to control dust include minimizing the area of the site which is subject to disturbance at any one time, use of mulch or other temporary covers on exposed soil areas, limiting the movement of trucks and construction equipment over exposed soil surfaces, and covering haul trucks to prevent dust emissions while in transit to the disposal site.

During dry weather conditions, spraying water on unpaved areas subject to heavy construction vehicle traffic will help control dust. Paved areas will also be kept clear of loose dirt that can be re-entrained into the air during vehicle passage. The use of stone tracking pads at access points to the site or washing of vehicle tires will greatly lessen the tracking of soil onto adjacent roadways. When freezing temperatures preclude the use of water to prevent the spread of dust, alternative measures will be evaluated.

Noise generating construction activities will be limited to the hours between 7:00 AM and 8:00 PM, Monday through Friday, and 9:00 AM to 8:00 PM on Saturday. All construction vehicles and equipment will be well maintained and operated in an efficient manner.

1.3.10 Community Character

The Hidden Creek development is envisioned to be a unique addition to the Village that will address significant housing needs in the region and will complement the other pre-existing uses in the area. This project is not expected to have an adverse effect on the established character of the immediate area or neighboring areas of the community as a result of its design features, character (style), or form of architecture. As such no additional mitigation is proposed.

1.3.11 Fiscal Resources

Summary of Revenues and Costs

The table below summarizes the revenues and costs projected for the Hidden Creek residential development to the Village of Monroe, and the Monroe-Woodbury School District.

Table 1-4
Revenue & Cost Summary:
Hidden Creek Estates

Jurisdiction	Projected Taxes ($)	Projected Costs ($)	Surplus/Deficit
Village of Monroe	$133,926	($90,045)	$43,881
Monroe-Woodbury Schools	$606,924	($186,858)	$420,066
Source: Tim Miller Associates, Inc.			

The proposed project is anticipated to generate a surplus of tax revenue for both the school district and the municipality. As no potentially significant adverse effects have been identified, no mitigation measures are proposed.

1.4 Project Alternatives

The New York State Environmental Quality Review Act (SEQRA) calls for a description and evaluation of reasonable alternatives to the proposed action which are feasible, considering the objectives and capabilities of the project sponsor. In addition to the proposed project that is assessed in this DEIS, the following alternatives are discussed in this document.

1. No Action
2. Freeland Street - Two Access Points
3. Multi Road Frontage Access
4. Additional Clarke Street Access

As discussed below, these alternatives would have environmental impacts that differ somewhat from the proposed project. Table 1-2 at the end of this chapter provides a quantitative impact comparison between the proposed project (149 units), No Action alternative, and other alternatives discussed in this chapter.

1. No Action

The No Action alternative considers the scenario that would occur if no development were to take place at the site. The site would remain in its current state. There would be no physical changes to the property under this alternative and no physical impacts.

However, under the No Action alternative, the beneficial impacts of the proposed action would not be realized. These benefits include increases in housing inventory and tax revenues to the Village and the school district. Unlike the proposed action, the No Action alternative will not help to satisfy the high demand for market rate housing opportunities. Compared to the proposed action, the No Action alternative would result in the following:

- Property value, tax assessments and associated tax revenues and costs to the municipality and school district generated by the property would continue to be relatively low.
- The majority of the site would remain as open, disturbed, undeveloped space. No impacts related to site disturbance would occur.
- Under the No Action alternative, the site would continue to be available for the uses that are permitted under the existing zoning.

2. Freeland Street - Two Access Points

The recommendations of this alternative have been included as part of the project as proposed.

3. Multi-Road Frontage Alternative

As requested by the Village of Monroe Planning Consultant, GreenPlan, an alternative site configuration showing the following features has been included as part of the DEIS. Complete specification for this alternative are included in the Final Scoping Document located in Appendix A.

i. Off street parking located at the rear of the residences, in garages or parking areas accessed by lanes or alleys.

ii. Residences designed to emulate traditional historic buildings in the Village of Monroe.

iii. Residences sited so they front directly on to streets or greens (rather than parking areas), with a uniform build-to line that establishes the front yard setback along the street when the residences front onto the street.

iv. Front yards a minimum of 15 feet and a maximum of 20 feet, consisting of lawn planted between the building and the sidewalk.

v. Sidewalks on both sides of the street.

vi. On-Street Parking

4. Additional Clarke Street Access

The Clarke Street Plan alternative is presented in response to comments provided by the traffic consultant to the Village of Monroe on the proposed project. This alternative shows a 285 foot long, 20 foot wide road connection to Clarke Street as an additional means of access to the proposed development. Similar to the proposed project, it provides a clustered plan with small loop roads creating a Village-type atmosphere for the development. In this alternative, the proposed footbridge connection to Clarke Street is replaced by new road access, crossing the 100 year flood plain across from the Clarke Street dead end. The Additional Clarke Street Access Plan, is, except for the new road connection, similar to the proposed project.

This alternative provides a 20 foot wide, 285 foot long road connection to Clarke Street from Road B, between Buildings 26 and 27. It utilizes the area of a foot path connection to Clarke Street in the project as proposed. This alternative would require the crossing of the 100 year flood plain on box culverts or bridge abutments.

Impact Comparisons

The following Table 1-2 summarizes the quantitative impacts associated with the proposed project, the Multi Road Frontage Plan, the Additional Clarke Street Access Plan, and the No Action Alternative.

Table 1-5
Alternative Impact Comparisons

Area of Concern	*Proposed Action*	*Multi Road Frontage Access*	*Additional Clarke Street Access*	*No Action*
Building Development Areas				
Pavement (acres)	5.45	8.11	5.58	.25
Building Footprint (acres)	3.06	3.03	3.06	0.03
Lawn/ Landscaping (acres)	8.89	9.39	8.95	2.27
Construction Disturbance				
Total Construction Disturbance (acres)	17.3	20.59	17.48	0
Impervious Acreage (acres)	8.51	11.14	8.64	0.28
Natural Resources Disturbance				
Wetlands (acres disturbed)	.31	.79*	.44	0
Upland Woodland (acres disturbed)	13.61	16.18	13.61	0
Flood plain (acres disturbed)	0	.45	.13	0
Residential Units				
Residential Units	149	149	149	2
Community Resources				
Population	261	261	261	0
Peak Traffic (trips/hour)	83	83	83	0
Water Demand/Sewage Flow (gpd)	19,575	19,575	19,575	0
School-age Children	21	21	21	0
Costs to School District	$186,858	$186,858	$186,858	$ 0.00
Revenues to School District	$606,924	$606,924	$606,924	$14,093
Village Taxes	$133,926	$133,926	$133,926	$3,130

Notes: Areas listed above are approximate.
Source: Pietrzak & Pfau, Engineering and Surveying; Tim Miller Associates, Inc.
* Wetland disturbance over .5 acres is not eligible for a National Wetland Permit.