

3. Comments and Responses

This chapter addresses the comments received during the SEQRA public hearing and the public comment period on the DEIS, as well as the NYSDOT comment letter received after the close of the comment period. Please note that excerpts from the transcript are printed as received and spelling of names, etc, have not been corrected. The comments are grouped by subject matter, paraphrased, summarized and referenced to the original source. The public hearing transcript is in Appendix A and all letters received are in Appendix B. These documents are annotated to show the comment number that addresses each comment herein.

3.1. General

Comment 1:

What is the project? Is that just the building itself, the parking lot, the road? What is the project? (Mr. Eckleburry, December 4, 2008 Transcript Page 23)

Response: The applicant is seeking approval for a special use permit and site plan approval for its entire project, which includes roadway and site improvements, construction of the new building, creation of parking areas, and the site access driveway.

Comment 2:

What is a DEIS? (Mr. Eckleburry, December 4, 2008 Transcript Page 24)

Response: DEIS is an abbreviation for Draft Environmental Impact Statement. This is the document that describes how the applicant will meet environmental issues and avoid what are called “adverse environmental impacts.” Part 617: State Environmental Quality Review defines a DEIS as follows.

Environmental impact statement (EIS) means a written "draft" or "final" document prepared in accordance with sections 617.9 and 617.10 of this Part. An EIS provides a means for agencies, project sponsors and the public to systematically consider significant adverse environmental impacts, alternatives and mitigation. An EIS facilitates the weighing of social, economic and environmental factors early in the planning and decision-making process. A draft EIS is the initial statement prepared by either the project sponsor or the lead agency and circulated for review and comment.

Comment 3:

Where online would someone find the environmental statement? (Trustee Marks, December 4, 2008 Transcript Page 15)

Response: The DEIS is available on the Village of Muttontown website (<http://www.villageofmuttontown.com/htm/deis.htm>), and a hard copy is available for viewing at the Village Hall during normal business hours.

Comment 4:

Is this the last meeting we are going to have for the public to address this? (Trustee Fine, December 4, 2008 Transcript Page 9)

Response: The Public Hearing on the DEIS was closed on December 4, 2008. Written comments on the DEIS were accepted through December 31, 2008. Additional public comments and questions would be heard on the Special Permit and Site Plan at one or more hearings specific to those issues.

Comment 5:

What is the estimated time of construction? (Deputy Mayor Juul-Nielsen, December 4, 2008 Transcript Page 33)

Response: Approximately 12 months, consisting of approximately four months for building foundation work and site grading, and eight months for the building itself.

Comment 6:

The FEIS should fully describe all plan/program modifications that have been made since acceptance of the DEIS. (Letter from Freudenthal & Elkowitz Consulting Group, Inc. dated December 29, 2008).

Response: Please see Section 2. Also, the building size has been increased by 395 square feet due to minor refinements to the building design. This slight increase is not expected to generate any environmental impacts. The High Holiday parking agreement with the C.W. Post Campus of Long Island University (“LIU”) has been formalized (see Appendix D). The Parking License provides complimentary use of the Lower Parking Lot during the High Holidays.

3.2. Building

Comment 7:

How did the size of the building increase from 13,000 square feet to 22,000 square feet? (Trustee Marks, September 24, 2008 Transcript Page 16)

Response: The synagogue has not increased in size from 13,800 to 22,173 square feet. The earlier reference to “13,800” only included the footprint of the ground floor – it did not include the 5,559 square foot lower level or the balcony area, which if constructed would be 2,419 square feet over the sanctuary. The previous total building area was therefore 21,778 square feet. The only increase is 395 square feet on the ground floor, from 13,800 to 14,195 square feet. The total of 5,559 square feet in the lower level, 14,195 square feet for the ground floor, and 2,419 square feet for the upper level comes to 22,173 square feet.

The building program was described in the DEIS and is further elaborated upon herein. Table 3-1 shows each building area, along with square footage, maximum occupant load, and proposed use. Please note that this table is meant to reflect a maximum case based on maximum occupant loads of multiple areas within the synagogue. The totals in Table 3-1 will exceed and will not match the genuine projected usage numbers noted elsewhere in the FEIS (such as Table 3-2).

In summary, on weekdays, a range of 63 people initially to 78 people in the future are anticipated in the morning (most carpooled) and a range of 93 people initially to 138 people in the future are anticipated in the afternoon (most carpooled). Evening events are variable depending on whether a confirmation class (25 initially to 35 in the future), adult education class (25 initially to 50 in the future) or special event is taking place. Special events are anticipated to range from about 112 people initially to 212 people in the future. The special event total exceeds the 100-person (initial) to 200-person (future) attendance noted in Table 3-2 (later in this document) because it accounts for cumulative totals which include possible kitchen occupants, the rabbi, and the cantor.

For religious services, 28-108 people are expected on a Friday night, 108 people are anticipated for a Saturday morning without a Bar/Bat Mitzvah, and 249 people are anticipated on a Saturday morning or evening when a Bar/Bat Mitzvah is held. Weddings would generally be on Saturday evenings or Sundays with attendance of up to 249 people. The Friday night and Saturday non-Bar/Bat Mitzvah service totals exceed the 20 to 50-

person (initial) to 50 to 100-person (future) attendances noted in Table 3-2 because they account for cumulative totals which include possible kitchen occupants, the rabbi, and the cantor.

Table 3-1 - Building Areas

	Interior Space		Exterior Space		Maximum Occupant Load	Anticipated Usage						
						Weekday AM	Weekday PM***	Weekday Evening	Friday Night Services	Saturday Services	Bar/ Bat Mitzvah	High Holidays
Upper Level												
Balcony	1,570	SF			138	0	0	0	0	0	0	** 138
Non-occupied Spaces*	849	SF										
Subtotal	2,419	SF										
Main Level												
Lobby	1,146	SF			229	NCU	NCU	NCU	NCU	NCU	NCU	NCU
Sanctuary Wing												
Sanctuary	3,400	SF			288	0	0	0	20-100	100	241	288
Oneg	3,200	SF			400	0	0	0	NCU	NCU	NCU	400
Brides Room/ Green Room	244	SF			3	0	0	0	0	0	0	0
Kitchen	351	SF			8	8	8	8	8	8	8	8
Kitchen Storage	71	SF				0	0	0	0	0	0	0
Terrace (outdoor)			2,920	SF	219	0	0	0	0	0	0	** 219
Education Wing												
Administration	381	SF			4	4	4	0	0	0	0	0
School Administration	210	SF			2	2	2	0	0	0	0	0
Rabbi	200	SF			2	2	2	2	NCU	NCU	NCU	NCU
Cantor	196	SF			2	2	2	2	NCU	NCU	NCU	NCU
Religious Study 1	305	SF			20	0			0	0	0	0
Religious Study 2	356	SF			20	15-20			0	0	0	0
Religious Study 3 (w/ Bath)	349	SF			20	15-20			0	0	0	0
Religious Study 4	310	SF			20	15-20			0	0	0	0
Non-occupied Spaces*	3,476	SF										
Subtotal	14,195	SF										
Lower Level												
Education Wing												
Multipurpose Room	1,825	SF			150	0			0	0	0	0
Religious Studies 5	430	SF			22	0			0	0	0	0
Religious Studies 6	364	SF			20	0			0	0	0	0
Religious Studies 7	320	SF			20	0			0	0	0	0
Religious Studies 8	320	SF			20	0			0	0	0	0
Outdoor Sunken Patio			2,780	SF	100	NCU	NCU	NCU	NCU	NCU	NCU	NCU
Non-occupied Spaces*	2,300	SF										
Subtotal	5,559	SF										
TOTAL	22,173	SF	5,700	SF		63-78	93 - 138	37 - 212	28-108	108	249	** 1,053

*Restrooms, coat room, corridors, storage, stairs, elevator, partitions, door jambs, etc. **Denotes an either/or item; denotes the maximum possible case
 *** Weekday PM refers to Hebrew School sessions, while Weekday Evening refers to a combination of Second Session Hebrew School plus Adult Education.
 NCU = Non Concurrent Use (i.e. one person enters lobby, moves to sanctuary, moves to Oneg after services, moves to lobby, and exits building)

On the High Holidays, for most services, attendance is anticipated to be less than or similar to a Bar/Bat Mitzvah service. On two dates, the morning service on the first day of Rosh Hashanah and the morning service of Yom Kippur, maximum attendance could be 1,053 people if the balcony is built and an outdoor tent is utilized. Use of both of these spaces at the same time is not anticipated, but is presented as a maximum case scenario. The Traffic Analysis and Commentary in Appendix E analyzes this maximum case traffic condition, including 288 people in the Sanctuary as per Table 3-1, not the 247-person capacity of the fixed seating. It is unknown at this time, how many shuttle buses there will be, or the exact schedule; it is reasonable to expect that there will be approximately 5

to 8 buses used throughout the High Holiday service times, plus at least 30 minutes prior to when they begin and after they end. The DEIS Traffic Study discussed a condition where 25-30 people would use each bus, and the FEIS Traffic Analysis and Commentary (Appendix E) analyzed a condition with 25 people using each bus, yielding 32 bus trips each way, for a total of 64 shuttle bus trips on each High Holy day (see Response 46). Shuttle buses can queue at LIU when not being used during the services, in order to maximize space on the synagogue property. It is also a viable option for some of these buses to stage within the synagogue property without blocking access to parking spaces. The five “Decorative Paver Inlay” spaces will also be left open during the High Holidays to allow loading and unloading of the buses; the 110 maximum on-site drivers will be directed to use the remaining spaces. Unoccupied buses will not be permitted to stage on-site in the 10-space cushion. These parking spaces must remain available for use in unforeseen circumstances.

The applicant is willing to examine the possibility of using the Jericho Middle-High School property as an alternate High Holiday overflow parking area in the event that one day LIU decides not to continue the signed lease agreement. There would be no conflict with the school district because the Jericho School District is closed during the High Holidays.

Comment 8:

You always intended to use the lower level, is that correct? (Trustee Fine, December 4, 2008 Transcript Page 5)

Response: Yes. The lower level consists of mechanical space, storage facilities, restrooms, and four classrooms.

Comment 9:

Was your intent that if the Jewish Congregation were granted approval, you would build the balcony at the same time or wait to see if things got better, more activity? (Deputy Mayor Juul-Nielsen, December 4, 2008 Transcript Page 5)

Response: It depends on the needs of the congregation with regard to High Holiday attendance. The current application includes a request for approval of the balcony expansion. If High Holiday attendance does in fact require the additional space, the applicant would add the balcony at that time as opposed to needing to come back to the

Village and go through the SEQRA process again.

Comment 10:

Will the bronze entranceway stay that bronze color or weather over time? (Deputy Mayor Juul-Nielsen, December 4, 2008 Transcript Page 27)

Response: Like any bronze structure, the entranceway will patina and weather over time.

3.3. Site Plan

Comment 11:

Is there a full landscaping plan? (Deputy Mayor Juul-Nielsen, December 4, 2008 Transcript Page 31)

If I could just clarify with Mr. Murphy, the plan for the planting schedule let's say, we are going to see that, correct? (Trustee Spillane, December 4, 2008 Transcript Page 32)

Response: The Site Plan Set includes a landscape plan and planting schedule which will undergo detailed review as part of the Site Plan approval process.

Comment 12:

Where is the site entrance? How far is it from Titus Lane? (Trustee Fine, December 4, 2008 Transcript Page 28)

Response: The entrance is between the two ponds and is approximately marked with two stakes at the site. It is approximately 700 feet south of Titus Lane and 800 feet north of Brookville Road.

Comment 13:

Aren't the ponds actually recharge basins, and therefore, wouldn't you need a fence around the ponds? (Deputy Mayor Juul-Nielsen, December 4, 2008 Transcript Page 31)

Response: The ponds will function as recharge basins and a fence will be provided around each pond. Landscaping will also be used to limit views of the fence and create a more natural looking setting. A detail showing the fencing is provided on the site plan. The fencing will meet Village Code requirements.

Comment 14:

Is the playground going to be fenced? Need to keep children away from ponds. (Deputy Mayor Juul-Nielsen, December 4, 2008 Transcript Page 25)

Response: The playground is not going to be fenced as all use is intended to be supervised. In addition, as the ponds will be fenced, there will be no access from the playground to the ponds.

3.4. Operation

Comment 15:

How many congregants come on a weekly basis and not the High Holy days? Can you guesstimate that? (Deputy Mayor Juul-Nielsen, September 24, 2008 Transcript Page 6)

Response: This is detailed on Pages 2-7 to 2-8 of the DEIS. The DEIS discussed the proposed program. In addition, a future program is provided herein (Table 3-2) that reflects the potential future growth of the congregation. Table 3-3 illustrates projected parking needs based on Table 3-2 usage numbers. The vehicle occupancies are discussed in the DEIS Traffic Study, or are reasonable projections. In all cases, the 120 on-site spaces are adequate to accommodate the parking demand. It is also noted that the site will have more provided parking spaces than code requires and more parking than the Institute of Transportation Engineers (ITE) recommends.

Table 3-2 - Proposed and Future Program Comparison

	Proposed operation	Future with potential growth
Educational programs		
Hebrew School	75 students each day from Monday through Thursday (distributed between two sessions), and 50 students on one Sunday a month	120 students each day from Monday through Thursday (distributed between two sessions), and 50 students on one Sunday a month. Note that for weekday classes, there are 6 grade levels with a maximum of 80 per grade anticipated (480 total), as only 80 solo Bar/Bat Mitzvahs can be accommodated.
Confirmation Class	25 students once per week, evening or Sunday morning	35 students once per week, evening or Sunday morning
Adult Education	25 people 10-15 times per year	50 people 10-15 times per year
Nursery School	45 students Monday through Friday	60 students Monday through Friday
Events with parents invited	Once or twice per year per age group, late afternoon or evening, approximately 100 people	Once or twice per year per age group, late afternoon or evening, approximately 200 people

Religious Services	Friday night service - approximate average of 20 to 50 people Saturday morning and some Saturday evenings - depending on whether there is a Bar/Bat Mitzvah, there could be up to approximately 150 to 249 people.	Friday night service: approximate average of 50-100 people Saturday morning and some Saturday evenings - depending on whether there is a Bar/Bat Mitzvah, there could be up to approximately 150 to 249 people.
Holidays (other than High Holidays) include Sukkot, Simhat Torah, Hanukkah, Tu B'Shevat, Purim, Passover, and Shavuot	About 10 events per years, with attendance of 100 people	About 10 events per years, with attendance of 200 people
Meetings	On occasion, 25 people	On occasion, 35 people
Special Events (Lectures, Fundraisers, etc.)	On occasion, 100 people.	On occasion, 200 people.

Table 3-3: Future Parking Projections

Use	Occupancy	Parking Need
Hebrew School/Nursery School	Mainly pickup-drop off	If there are 9 staff members and if half of parents all park and walk their children inside, short-term parking would be 103 vehicles
Adult Education	1 to 1.5 per vehicle	33-50 vehicles
Events with parents invited	2.5 per vehicle	80 vehicles
Friday night service	2.5 per vehicle	40 vehicles
Saturday Bar/Bat Mitzvah	2.5 per vehicle	Up to 100 vehicles
Non-High Holiday holidays	2.5 per vehicle	80 vehicles
Weddings	2.3 per vehicle	108 vehicles
Meetings	1 to 2 per vehicle	18 to 35 vehicles
Special events	2.5 per vehicle	80 vehicles
High Holidays	2.27 per vehicle	110 vehicles

Since the DEIS Traffic Study and FEIS Traffic Analysis and Commentary (in Appendix E) analyze the “maximum possible case” scenarios (with the highest potential for traffic impacts or parking impacts), none of the off-peak period uses (e.g., meetings, adult education, etc.) reflect worse traffic impacts or requirements for additional on-site parking.

Comment 16:

You hope to keep the school going there? How many days is that in the week? (Deputy Mayor Juul-Nielsen, September 24, 2008 Transcript Page 6)

Response: As stated on Pages 2-7 and 2-8 of the DEIS, religious instruction (Hebrew

School) is currently held on Monday, Tuesday, and Thursday from 4:00 to 6:00 PM and on Mondays and Thursdays from 6:15 to 8:15 PM during the school year. Each class has about 25 students for a total of about 125 students. With the new building, there are multiple classrooms and it is anticipated that 75 children will attend Hebrew School in three to four classrooms on each day from Monday through Thursday for a total of 300 attendees a week.

For the future condition, a maximum of 120 students per day, four days per week, is projected. The Hebrew School student classes typically correspond to grades 3 through 7 and include a maximum of 80 students per grade. This corresponds to the maximum level of 80 annual Bar/Bat Mitzvah times. A younger class for grades Kindergarten through 2 may also meet, accounting for the other 80 children: 80 students x 5 grades in Hebrew School = 400, + 80 K-2 children = 480 students.

The actual Hebrew School times are unknown, but for the purposes of traffic analysis at maximum building occupancy, it was projected that there would be two consecutive Hebrew School sessions separated by 30 minutes to allow the first session students to leave before the second session students arrive. This could correspond, for example, to a first session between 4:00-6:00 PM and a second session from 6:30-8:30 PM. The 6:15 PM start of the second session refers to the existing, not the proposed, schedule.

In addition, it is anticipated that religious instruction would be held on one Sunday morning a month for about 50 students. A confirmation class is held one or two evenings a week with about 25 children.

Comment 17:

Is there a nursery school program in place now or one anticipated and what kind of hours and days of the week are we anticipating for that? (Trustee Marks, September 24, 2008 Transcript Page 24)

Response: There is currently no nursery school. In the new building, the applicant intends to offer a nursery school open only to the children of synagogue members. The applicant anticipates three age groups with classes of about 12-15 children. The nursery school would operate from Monday through Friday during the day for four to five hours. While the specific drop off and pick-up times are not known as the program does not yet exist, hours will likely fall between 9 AM and 3 PM.

3.5. Catering

Comment 18:

Can you talk a little bit about the synagogue having catering, so if there's a wedding or Bar Mitzvah you would be able to have a Kiddush afterwards at the facility, but it minimizes the size, and then for a wedding it would not be a facility for a reception? (Trustee Marks, September 24, 2008 Transcript Page 16)

Response: The vision is not to have in-house catering. Many other synagogues have in-house catering, but it is not needed or wanted by this membership. The kitchen will allow congregants to have outside caterers bring in luncheons following services, with any major party following at another location, as it does now. The Oneg can accommodate 180 people for meals (18 tables of 10). There will not be a large catering facility for large parties to be held at this synagogue.

Comment 19:

Will there be evening affairs? (Trustee Spillane, September 24, 2008 Transcript Page 17)

Response: Some members might want to have a Saturday night party, but any such event would be limited by the size and scope of the building, and by the lack of an in-house caterer. It is anticipated that most evening affairs would be held offsite at a catering venue. While a facility with an in-house caterer will book an event every weekend, this facility – without an in-house caterer and with use of the facility limited to members only – will generate few evening events. The capacity for a party is limited by the size of the Oneg which can accommodate 180 people for meals (18 tables of 10).

Comment 20:

Can non-members have a party there? (Trustee Spillane, September 24, 2008 Transcript Page 17)

Response: No. This will not be a public party facility. The membership is building the synagogue to serve its own members.

Comment 21:

There was understanding that there is no catering. (Deputy Mayor Juul-Nielsen,

September 24, 2008 Transcript Page 17)

Response: There will be no on-site caterer, and therefore any party for members would involve having food brought in by an outside caterer.

Comment 22:

Is there going to be some sort of fellowship hall, whatever you want to call it, where folks gather for coffee and cake, Bar Mitzvahs, things like that? And if there is that, I would like to know how many people can be accommodated in that hall, please? (Mrs. Gilmartin, September 24, 2008 Transcript Page 21)

Response: The portion of the synagogue in which socialization would take place is referred to as an oneg area. This oneg area is 3,200 square feet, large enough for 18 round tables of ten seats each, for a total of 180 people. This is in keeping with the expected typical Saturday morning attendance. Even when there is a larger attendance for a Bar/Bat Mitzvah, not everyone will stay for the luncheon. The luncheons are generally buffets, with food that is easy to handle, like bagels, cookies, etc. Therefore, if there are not enough seats, some people may stand, or take a seat after someone else has left.

Comment 23:

We were told today that primarily this temple is being built and supported by the founding 150 congregants or so, and it's their intent to use this for their own Hebrew school. My question is, to what extent you can define whether the use, for other activities, borders being a commercial use and religious use for the 150 members? For instance, if this building is going to be rented out for events, with or without in-house catering doesn't mean anything, some other caterer will come and serve and provide catering, in which case even a bigger problem when there is not in-house caterer; whether there should be some limit imposed as to how many outside events could be accommodated at this facility so it doesn't become a commercial enterprise. I think you heard from a gentleman here, it becomes a Bar Mitzvah factory, and certainly I don't think it is in anybody's interests to do that. We were told that is not in the intent but is there a possibility that the Board can establish some limits as to how many such events could be allowed if this becomes a problem? I believe the status would be tax exempt status. So I put that question to you. (Mr. Kourtides, September 24, 2008 Transcript Page 27)

Response: Please refer to the response to Comment 20. This facility is being

constructed for use by its members, and will not host Bar or Bat Mitzvahs, or any other events for non-members and will not be rented out to or used by non-members. There is no intention of having this facility become anything commercial in nature.

3.6. Growth of Membership

Comment 24:

Is this going to be such an outstanding facility that it would draw more than 150 families? (Trustee Marks, September 24, 2008 Transcript Page 14)

Response: The vision for the synagogue is to create a synagogue that is smaller and intimate, that's built on personal connection. So growth will be controlled. One thing that will clearly limit growth is a guarantee of solo Bar and Bat Mitzvahs. There are only so many children who can be accommodated on maybe 40 weekends a year at most, with a maximum of one in the morning, and one in the afternoon. There may be some growth beyond the 150 families, but the congregation will not grow exponentially into a mega synagogue. There are also other synagogues in the area to attract Jewish families, and area demographics do not support significant growth in all of these synagogues.

A specific number of families cannot be determined, as different families have different needs and different impacts on space limitations. For example if many empty nesters joined, they would have no impact on any activities related to children, and would mainly affect High Holiday service limitations. As previously discussed, if too many families with young children joined, Bar and Bat Mitzvahs could not be accommodated. So while there is no set limit on number of families, this is an issue that takes care of itself naturally due to the size limits of the sanctuary and the available Bar/Bat Mitzvah dates each year. The Temple Board would have to consider limiting membership if the number of families started to outgrow this building's limitations. In the alternative, if they wanted to have more families than the building could support, they would need to apply to the Board of Trustees for a building expansion.

It is noted that this discussion is very speculative. Current High Holiday attendance on two days of the year is around 400-500 people, with 150 families. The proposed synagogue is sized to allow about twice as many people on those two dates. It is unknown if this number will ever be reached, much less exceeded. SEQRA anticipates that the analysis be reasonable. While some growth is reasonable, excessive growth is not. The

analysis has accounted for a doubling of High Holiday attendance. Similarly, each other analysis has taken the maximum occupancy of the space into account to show a maximum possible case scenario.

Comment 25:

Do you have any proposed limit in terms of the number of families you will accommodate? (Trustee Marks, September 24, 2008 Transcript Page 15)

Response: Similar to other religious facilities, there would not be any imposed cap. The limit of growth would be controlled by the factor of solo Bar and Bat Mitzvahs, by the fact that there are other synagogues in the general surrounding area, and general area demographics. The rabbi meets with every student who is preparing for his or her Bar or Bat Mitzvah, and these students would all attend the member-only Hebrew school, which has size limitations. The congregation also envisions sitting together as one community for the High Holidays as opposed to other Reform synagogues which may have an early service and a late service to allow their size to double. Those factors together would control and limit future growth.

Comment 26:

What if a new rabbi has a different vision? (Trustee Marks, September 24, 2008 Transcript Page 15)

Response: The congregation founders share this vision with the current rabbi, and should the current rabbi ever leave this congregation, it is certain that the congregation would only choose a new rabbi who agrees with their common philosophy. Everyone involved on behalf of the applicant is committed to fostering a more intimate community than some of the other larger synagogues in the area. In the unlikely event that this vision changes in the future and a building expansion and/or additional parking were needed, this would require approval from the Village Board of Trustees.

Comment 27:

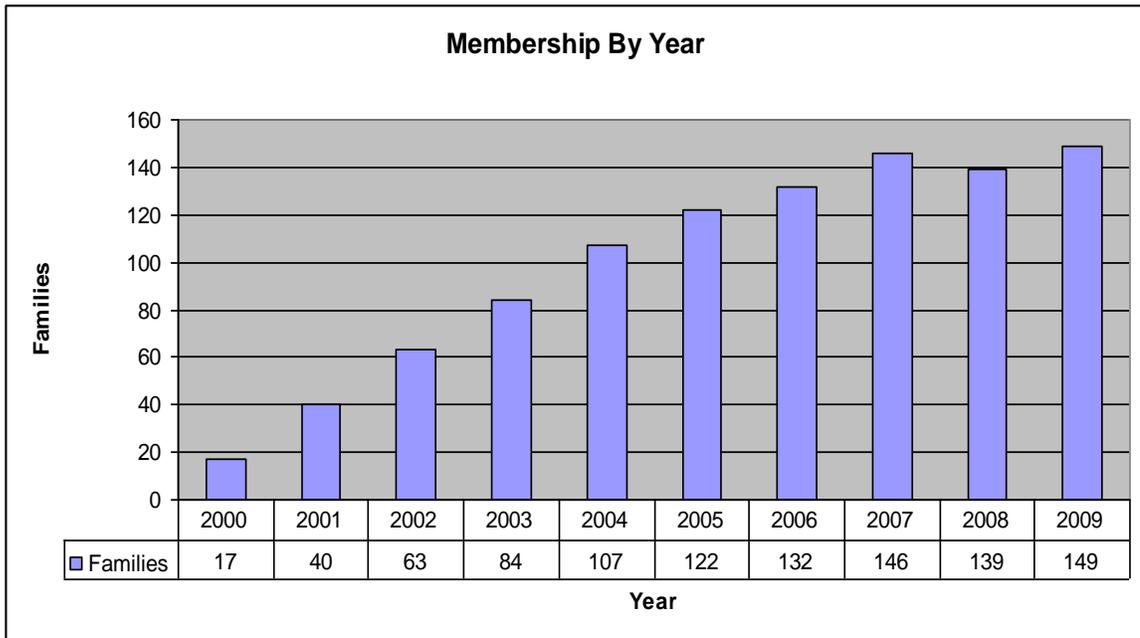
This has been a stable congregation for a number of years? (Deputy Mayor Juul-Nielsen, September 24, 2008 Transcript Page 6)

In the 10 years that you have been there, has your synagogue grown? (Trustee Spillane,

September 24, 2008 Transcript Page 16)

Response: In the past ten years, the congregation has grown from 17 families in 2000 to 149 families in 2009, and has been fairly stable for the past several years (Figure 3-1). Based on this trend, it is quite reasonable that most of the families who would want to join this congregation have already done so, whether or not the congregation has its own building or shares space with the Brookville Reformed Church. As shown in the table below, after an initial growth, the congregation has been fairly stable for the last several years. In other words, this congregation has already achieved much of its growth potential, which is not specifically related to its location.

Figure 3-1 - Membership History



Comment 28:

That is at a borrowed facility. Maybe something like this would draw new people. You might have potential to grow more. (Deputy Mayor Juul-Nielsen, September 24, 2008 Transcript Page 16)

This facility will attract a lot of new families as there is one day a week Hebrew School (Mr. Sclar, September 24, 2008 Transcript Page 22)

My last comment: There's talk about the growth of the temple. I have school age children

that will get their Bar Mitzvah dates in mid-year and another in three years. I have to say that there's a huge buzz about your temple right now. It is young school age kids, and part of it, besides you having a wonderful reputation, is that there is Hebrew school one day a week and we all send kids two days a week and it is really tough with after school activity and homework -- so I have to say there is a huge buzz about this. So I think there is a great amount of interest in new membership in your temple. (Mrs. Neiberg Smith, September 24, 2008 Transcript Page 24)

Response: Please refer to the responses to Comment 24 and Comment 27. The past growth of this congregation includes most of the growth that is expected to occur. The congregation does not expect or want to grow exponentially. The Rabbi wants to know the congregants and the congregants want to know each other. The congregation is creating a place with a strong sense of community, where everyone knows each other. The building (and with respect to future Bar or Bat Mitzvahs, the Hebrew school) have size limitations and can not accommodate a significant amount of growth. See Table 3-2 for an estimate of potential growth.

3.7. Traffic

3.7.1. Site Access

Comment 29:

Will there be a new traffic light? (Trustee Miller, September 24, 2008 Transcript Page 13)

Response: A NYSDOT Traffic Signal Warrant Analysis was performed and is included in the FEIS Traffic Analysis and Commentary (Appendix E). There will not be a traffic light as there is not enough traffic associated with this synagogue to meet any of the nine (9) NYSDOT warrants for a new traffic signal (each “warrant” is a traffic feature which could legally justify the installation of a new traffic signal).

Comment 30:

Is there going to be a separate turning lane to get onto the driveway? (Mrs. Elizabeth Gilmartin, September 24, 2008 Transcript Page 21)

The deceleration lane that is going to go northbound right past Brookville Road, in my opinion, does not slow down fast enough to make that right turn into the temple. Just like many years ago there was a problem with St. Thomas, where I was part of that decision, we were very concerned about the traffic. And we had the state extend their deceleration and acceleration lanes an extra hundred feet, hundred and fifty feet to make sure if buses in or cars in, that there is enough deceleration and acceleration; but that becomes a problem only because you are now on the other side of Brookville Road unless you move ingress and egress further north. Because now you have got cars slowing down on a 55 mile per hour highway to get into the right-hand lane where you do have residential driveways, so you create gridlock and could cause an accident. (Mr. Richard Entel, December 4, 2008 Transcript Page 21)

Would you also be able to give us an approximate number of cars that would be able to queue up in the deceleration lane before the synagogue? (Trustee Marks, December 4, 2008 Transcript Page 29)

Response: The deceleration lane has been lengthened by more than 100 feet since it was first proposed. Following discussions with Sidney B. Bowne & Son, LLP, the Village engineer, the deceleration lane was lengthened to 351 feet, with its taper ending just north of the more southerly located of the two residential driveways on the east side of Route 106. A copy of the most recent Highway Work Permit plan set is included in Appendix F to illustrate this new proposed length. The proposed deceleration lane can store 14-17 vehicles, depending on how closely spaced they are. The deceleration lane was designed according to national and New York State accepted civil engineering standards, including the American Association of State Highway and Transportation Officials (AASHTO) text, *A Policy on the Geometric Design of Streets and Highways*. Based on the projected number of vehicles that would be using this lane at any time, the length of the deceleration lane is more than adequate. This lane will not hinder traffic on the main lanes of Route 106, nor will it back up or cause queuing or gridlock in front of either adjacent residential driveway. Next, as discussed in Section 1, the original traffic study included all southbound vehicles entering via a southbound U-turn at Route 106-Brookville Road, and then a northbound right turn into the property using the deceleration lane. With the newly approved median opening directly across the proposed site driveway, entering southbound vehicles will use

the new median opening instead of this deceleration lane; this decreases deceleration lane volume by approximately 50 percent. Up to 103 vehicles are projected to use the deceleration lane during the “maximum possible case” condition (the PM peak hour with 187 Hebrew School-related entering vehicles), with no genuine “queue” calculation because the northbound right turn is a free flowing movement. The deceleration lane is more than long enough to accommodate the projected peak hourly entering volume without encroaching onto northbound Route 106. Moreover, given the close relative location of the traffic light at the intersection of Route 106 and Brookville Road, many vehicles will be approaching this deceleration lane at speeds below 55 mph, having begun from a stopped position at the traffic signal. Next, the proposed 351-foot deceleration lane length is adequate. Finally, sight lines are very generous and there is no issue with seeing from the north or south if a driver is slowing down within the deceleration lane. This deceleration lane should not increase the chances for an accident, and it is unnecessary to relocate the proposed driveway.

Comment 31:

You can't use a shoulder legally as a road, you have to stay on the main road then take a right. (Mr. Eckelburry, December 4, 2008 Transcript Page 24)

Response: There is no intent of using the shoulder as a travel way. This application includes a set of road plans which clearly illustrate a paved deceleration lane of adequate length. The deceleration lane is completely legal for travel to slow down before turning into a driveway.

Comment 32:

At the Dec. 4, 2008 Public Hearing the Applicant presented a plan indicating a proposed right turn/deceleration lane into the Brookville Jewish Congregation [sp] site. The presented design of the lane into the site did not show the driveway of the abutting property owner south of the site. This driveway appears to fall in the middle of the transition area, which may not be desirable. Also, a second driveway is located approximately 130' south of the first driveway. The Applicant must indicate both of these driveways on the design plans. The proposed plan must meet AASHTO and NYSDOT requirements for right turn/deceleration lanes and must address any safety concerns for the two driveways. (Letter from Paul

Stevens, P.E., dated December 23, 2008)

Response: As discussed in the response to Comment 30, the plans have since been revised to indicate these two driveways on the east side of Route 106. There is no longer an issue with the two driveways and their locations relative to the proposed deceleration lane. The more southerly of these two driveways is located just before the taper begins for the deceleration lane, and thus it will have exactly the same conditions as it does now. The northerly residential driveway will have the benefit of being able to access a better paved deceleration lane, as opposed to a shoulder. There will be little to no conflict with drivers entering the synagogue because the northerly driveway location is further away from the synagogue than is needed for the deceleration lane storage. The new deceleration lane was designed to include this northerly driveway at the specific request of the Village engineer (again, as discussed in the response to Comment 30). In addition, Route 106 is quite straight in this area and sight distance is not an issue. The deceleration lane meets AASHTO and NYSDOT requirements and is more than adequate to accommodate the projected numbers of vehicles.

Comment 33:

Will there be an acceleration lane to exit the site? (Trustee Fine, December 4, 2008 Transcript Page 29)

Response: No. There is adequate sight distance to the south, and whereas entering traffic volumes are more concentrated (to reach the synagogue in time for the start of a Bar Mitzvah, for example), exiting traffic is more dispersed because congregants tend to leave on a more relaxed schedule.

The fact that exiting traffic is more dispersed than entering traffic is a known fact based on several features: (1) empirical knowledge, (2) discussions with congregation representatives, and (3) based on the existing operation of the synagogue, with minimal yet relatively evenly spread out five-minute exiting volumes over the course of 50 minutes.

3.7.2. Accidents

Comment 34:

I think Hillary Chelson (ph) was killed at that traffic light on Brookville Road and prior to that someone else was killed. Talk about death on Brookville Road, we are not talking accidents but they were killed. And I think if you go to the police records, you probably find more at that intersection at that light. (Ms. Kim Costa, September 24, 2008 Transcript Page 25)

There's been plenty of accidents on 106 as it is and Brookville Road and 106. You can pull all the traffic reports and all the accident reports from Old Brookville, you'll see there was just one the other day. That is with nothing. Now having a temple and kids going to get tutored for Bar Mitzvahs, so forth there is going to be a tremendous amount of traffic which is no problem if you control it properly. If not, there will be a lot of serious accidents. (Mr. Richard Entel, December 4, 2008 Transcript Page 21)

Response: The applicant has demonstrated every intention of working with the Old Brookville Police Department to ensure proper traffic control during busy periods, and has a letter from the Village Police Department stating their availability to cover the synagogue site. At the request of the Village traffic engineer, due to the new geometric configuration now proposed at the site driveway, the applicant requested a new letter from the Old Brookville Police Department to confirm service ability. The Department has provided a new letter dated July 2, 2010, and a copy is included in the FEIS in Appendix B.

Standard traffic engineering practice includes requesting accident data in the immediate area for the latest three-year period. There were no serious accidents at the immediate study intersections during the latest three-year period for which data was available, and the Route 106 segment nearest the site had no reported accidents. The proposal will add a deceleration lane into the site, plus a new southbound left turn lane into the site (which will prevent the sight distance issue inherent with southbound U-turns at the Route 106-Brookville Road intersection), so it will therefore not significantly yield increased collision rates.

Although the introduction of a new driveway has the potential to increase the link's accident rate, the driveway design has been designed by the applicant's engineer to optimize safety conditions and minimize the number of future points of conflict: there will be a long northbound deceleration lane for entering right turns; there will be a long southbound left turn median storage lane with more than adequate sight distance for entering left turns; and there will be no exiting left turns.

Comment 35:

I would like to address the Board. My qualifications are as a Village resident for the past 32 years who lived directly on Route 106. To get into my house or out of my house I have to deal with Route 106. So I have intimate knowledge of traffic patterns on 106 that I don't believe anyone else in the room has. Second of all I have been a general surgeon for the past 35 years and acted on trauma teams in most of the local hospitals and witnessed the carnage of high speed motor vehicle accidents first hand. I think my objection is this is an extremely poorly conceived project based on the risk to members of the Jewish Congregation of Brookville, Village members, and the general public. I reference the Draft Environmental Impact Statement study, November 2007, pages 27, 28, 29, where as a point was brought up, that each day there will be 75 kids at Hebrew school, each day 40 kids at nursery school, that as you go on, Bar Mitzvahs and Bat Mitzvahs every week in anticipation to 150, 250 people. I leave the High Holidays out because they are separate. My concern realistically is the fact that this is equivalent to a very large commercial operation running seven days a week, morning, noon, night. Dozens of cars are going to be exiting roughly at the same time. This is the congregation now, over the next 5, 10, 15, years, how many participants will there be in this congregation? I don't know that; but my guess is you would hope that they are going to increase. I would hope they will not.

Response: The schedule of events anticipated at the synagogue is presented in Table 3-2. The highest levels of activity were evaluated for impacts and safety as part of a traffic study contained in the DEIS and supplemented by additional analysis in Appendix E of this document. This analysis concludes that the synagogue, operated as analyzed and with the access proposed, can be operated safely and with little effect to traffic flow given the traffic signal retiming described in Appendix E, subject to NYSDOT concurrence.

Comment 35A:

To describe the anticipated traffic pattern, all people exiting the proposed center will have to turn to the right and travel north on Route 106. Approximately 700 feet north is a U-turn lane at Titus with a queue lane. That is going to be the route people are going to take. Some will go to the north up 106, some will want to go to the south on 106, and every single one of them coming out of there will have to cross two lanes of traffic and try to get into the queue lane. Now, you can Google all kinds of things. I looked at the ratio speed for stopping distance. 106 has a stated speed of 55 miles an hour. You go 55 miles an hour on 106 you absolutely will be run over. A car travels 65, 75. We're talking motorcycles, cars, we are talking about 18-wheel trucks. At 55 miles an hour you are traveling 80 feet per second. Reaction time for seeing something, to reacting and getting your foot off the gas onto the break is between a third -- three quarters of a second and one and a half seconds. You would have traveled 120 feet in that period of time. To stop a car traveling 55 miles an hour is 155 feet. That is 65 miles an hour, that is 288 feet, at 75 miles an hour its 371 feet. "The court shall further take notice that such tables are the results of experiments made with motor vehicles unloaded except for the driver, equipped with four wheel brakes, in good condition, on dry, hard approximately level stretches of highway free of loose material. All facts and figures are for a driver who is alert, well rested, in good health and not impaired by alcohol or medication, weather conditions dry, wet snow, darkness, the size of the car. Inertia is a combination of speed and weight. Stopping an Escalade or Hummer is going to take a dramatic more amount of footage then stopping a compact car. Stopping an 18 wheeler loaded with gravel at 75 miles an hour is over 600 feet.

Response: Any issue with drivers disobeying the 55 mph speed limit by 10 mph or more is an enforcement issue. The applicant has illustrated an ability and willingness to work with the Old Brookville Police Department in any way possible, and has provided a letter in the FEIS from the Police Department regarding service availability.

The comment makes statements regarding the abilities of vehicles to stop from high speeds. The analysis performed indicates that the operation of the synagogue as proposed will have a minimal effect on the existing traffic stream. The access

design is adequate, gaps exist in the existing traffic stream to handle site traffic, and sight distance in the vicinity is sufficient. Vehicles traveling at speed on Route 106 will not stop. All delays will involve site traffic, isolated from through traffic in turning lanes or on the site itself.

Comment 35B:

You now have 90 parking places all trying to come out to 106 and half of them, giving credit for half, are going to try to get into the queue lane. The queue lane will handle seven cars. If you have people trying to get into the queue lane and it is full you know how people stop in the speed lane in 106 you might have 10 or 15 cars. So, my point, is that I think there are two categories of drivers here, the ones coming north and get stopped at Brookville Road by the traffic light won't have enough speed usually to create a risk pattern by the time they get to the driveway that's anticipated. But the ones that get the green light and are speeding up or actually speed up to get through the yellow they could easily be traveling at 65 or 70 miles an hour by the time they get to the driveway. The solution is a traffic light; but the DOT will not put a light for churches, synagogue or commercial business until enough people have been killed or maimed. Does the village of Muttontown or the Jewish Congregation of Brookville want to create a killing zone? (William Miller, December 4, 2008 Transcript Page 21)

Response: The issue of site-traffic distribution is addressed in the response to Comment 35. Drivers waiting to make the exiting movement will queue within the property, and will not have access to Route 106 until the first vehicle is able to move through. Moreover, the peak U-turn volume of 107 vehicles an hour (including 94 vehicles associated with the synagogue) at Titus Path corresponds to approximately two vehicles every minute. The peak expected queue is just four vehicles long. There are more than enough gaps in southbound Route 106 traffic such that drivers would be able to make their turn without waiting several minutes in the queue lane. AASHTO standards dictate that there must be room to handle the peak two-minute volume, which is equal to two or three vehicles. There is more than enough room to accommodate a queue of that length. And therefore, there is no issue with drivers overfilling the queue lane or stopping in a travel lane. The relative location of this median break to the synagogue has been

deemed acceptable by the NYSDOT, and the median break can handle U-turns. See also the response to Comment 29.

3.7.3. Median

Comment 36:

Will the median be closed? (Trustee Miller, September 24, 2008 Transcript Page 8)

Response: The median opening directly across from the property was planned to be closed when the DEIS was prepared, as discussed in Section 1 and as discussed in great detail in 2007 in front of the Village Board. The Board asked the applicant to analyze the next U-turn to the north in detail, and make sure there would be no effect by moving U-turning drivers up to that location. The applicant analyzed the potential U-turn volumes, and the amount of room drivers have to move over, plus the significant lengths of views that drivers can see down Route 106. Based on this analysis, there is no adverse effect by having drivers use the next median opening to the north, as had been agreed to by NYSDOT.

The median opening to the north is still planned for closure, because its location coincides with the new southbound left turn lane into the subject property. Due to the new southbound left turn lane into the site, as discussed in Section 2, there will be approximately 50 percent fewer northbound vehicles using the proposed deceleration lane than what was analyzed for the DEIS traffic study.

Comment 37:

If you close the median, cars and buses have to make a U-turn at Brookville Road. Is there adequate turning radius for a bus? (Deputy Mayor Juul-Nielsen, September 24, 2008 Transcript Page 11)

Response: The prior plans discussed in the DEIS included an adequate turning radius and a left turn lane installed at the intersection of Route 106 and Brookville Road, for the purpose of accommodating U-turns. As discussed above in Section 2 and in the responses to Comments 31 and 36, there will now be a new median opening directly across from the proposed site driveway, so there will be no need for a southbound left turn lane at Brookville Road, and therefore, no U-turns (by

buses or otherwise) associated with the proposed synagogue. The plans illustrating this new condition are included with the FEIS in Appendix F. Based on the applicant's engineer's travel time between the proposed synagogue and LIU, and on the higher-order nature of Route 106 and Northern Boulevard as contrasted with Muttontown Road, all buses would leave the site, go north on Route 106 to Northern Boulevard, and travel west on Northern Boulevard to the LIU campus. The return trip would lead east on Northern Boulevard, then south on Route 106 into the site.

Comment 38:

Is there a turning left lane light, the left arrow at Brookville Road? Would there be one? (Trustee Marks, September 24, 2008 Transcript Page 25)

Response: There is a northbound left turn arrow, not a southbound left turn arrow. There is no plan to institute a southbound left turn arrow at this time, since left turns will be made directly into the site, the site will generate no southbound left turns at this intersection, and there will not be a left turn lane at Brookville Road.

Comment 39:

Which is the next median [opening] after the one being closed? My understanding is the next median does not have a turning lane. I am sure most people in Muttontown would agree 106 is an incredibly dangerous road; usually you hope one car doesn't make that turn, when there is no turning lane, when it does -- you watch people slamming on their brakes. When there is a turning lane it certainly doesn't have enough room for more than two or three cars. My concern is when you have a Congregation letting out school, 30 children per grade, you only have two grades each day, 60 kids leaving, probably about 30 cars and if you have half of them turning around that's -- I think creates a very dangerous and serious situation on 106. That's my first very real traffic concern.

Response: The next median opening is at Titus Path. This question was raised by New York State DOT and by this Board two years ago. The applicant's engineer analyzed the Titus Path intersection at the request of this Board and New York State DOT, because there would be an increase in the number of left turns at that

location. Titus Path has a 160-foot left turn lane which was analyzed in the DEIS traffic study, a public document. This length is enough room for eight queued vehicles and is more than capable of handling the additional traffic. In the DEIS Traffic Study and in the “maximum possible case” conditions, the maximum projected queue length is four vehicles long. There is no expected traffic issue with this movement.

Comment 39A:

The second concern I could think of is 106, a lot of people bike ride and walk on 106. I walk to get my friend on Ironwood and we walk, I think you will have a lot more people walking especially if there is limited parking; I think you will have people coming from the neighborhood walking and using the temple and crossing over 106. I think that is a very scary, dangerous thing on that road.

Response: The development plan includes the installation of “No Stopping” regulations and signing on Route 106 in the vicinity of the site. This, along with other measures to deal with parking overflow during occasional special events, will eliminate any attendees walking on Route 106.

The access plan does, however, include conversion of a portion of the shoulder on the east side of Route 106 into an active right turn lane. Given that there are no sidewalks on Route 106, this will have an effect on pedestrian travel as well as bicycle travel in the area that currently uses the roadway shoulder. However, the existence of a right turn lane rather than a shoulder is not inconsistent with conditions in many other areas on Route 106 at intersections and major driveways.

The site will have more than adequate parking for its typical weekly activities.

Comment 39B:

And my question is, is this report that said there is no impact at the median, is this report something that will be made public that we can read and pass on? I know I have, there's a conflict with an open house school night, with a meet the teacher night with the six graders tonight, I know a lot of moms that are not here tonight that would like to be here that are all concerned with the safety on 106. That report is something we would be interested in seeing. (Mrs. Neiberg Smith, September 24, 2008 Transcript Page 18)

Response: The DEIS traffic study and the FEIS Traffic Analysis and Commentary (Appendix E) are public documents. As stated on the first page of the FEIS, both documents are available for public viewing on the Village website and at Village Hall.

Comment 40:

I live on 106, one lot south of the proposed site. I'm familiar with the left turn on the Titus median. Let's say, there is a left turn; a left turn lane which would accommodate three or four cars at one time. However, I can assure you that in order to make the U turn, if there is any traffic on 106, more than one car at a time cannot make a left turn, by the time the next car comes around there is more traffic coming south on 106. So, if there are a number of cars coming out of the parking lot trying to make the U turn, it will create a substantial amount of confusion and perhaps some danger. That's one comment regarding that particular turn. People coming in a southbound direction trying to make a U turn to access the temple, however, will have to face the problem at the Brookville Road traffic light where there is no left turn lane. And that is a very short turn. And someone raised the question about a bus being able to make a U turn; the bus cannot make a U turn especially if a left lane is created which will make that radius even narrower, smaller. (Mr. Renos Kourtides, September 24, 2008 Transcript Page 19)

If they put no u turn on Titus Path, does that mean all the traffic will come into our street? We have a bus that stops at 106, can you imagine the traffic from the temple, now you have buses from Jericho stopping, and if they go to religion after school it's going to be a nightmare. (Ms. Costa, September 24, 2008 Transcript Page 26)

Response: The Titus Path median opening has room for seven to eight vehicles. It is not an issue if only one driver can make the northbound U-turn at a time – as discussed in earlier responses, the queue lane will have more than enough room to handle drivers who need to wait for a gap to make the U-turn. Next, as discussed in the response to Comment 39, the maximum projected queue length is just four vehicles. With respect to a U-turn at Brookville Road, as discussed in Section 2 and in the responses to prior comments, the newly proposed median opening across from the site's driveway will allow southbound drivers to enter this site directly, with no need to travel to Brookville Road and make a U-turn. There will

be no site-related southbound U-turns at the intersection of Brookville Road with Route 106. There is no projected traffic on any side street as indicated in the DEIS Traffic Study and in Appendix E.

Comment 41:

How long will the left turn lane [at Route 106-Brookville Road] be? Because I know at the intersection of 25A and 106 that was a very short left turn lane, and they lengthened it a couple of years ago, that really did help. Maybe if they need to make a longer turn lane, this would be the time to do it, if we need to modify that. (Deputy Mayor Juul-Nielsen and Trustee Miller, September 24, 2008 Transcript Page 20)

Response: With the newly approved median opening at the driveway discussed in Section 2, there will no longer be a southbound left turn lane at Brookville Road associated with this application.

Comment 42:

Can a bus make the left turn without crossing the median or the shoulder? (Deputy Mayor Juul-Nielsen, September 24, 2008 Transcript Page 20)

Response: As discussed in the response to Comment 41: the newly proposed southbound left turn at the site driveway means there will no longer be a new left turn lane at the Route 106-Brookville Road intersection. This comment is now not applicable.

3.7.4. Speed

Comment 43:

If you have a school there, normally where there are schools and children the speed limit is reduced to 25 miles an hour. In your case there would be no slow down of traffic on 106? (Trustee Miller, September 24, 2008 Transcript Page 9)

Response: A school speed limit is only permitted when certain conditions in the New York State Vehicle and Traffic Law (Section 1643 – see Appendix F) are met, including, “some of the children walk or bicycle to or from the facility, or the

facility and related facilities [e.g., classrooms, cafeteria, gymnasium, playground, athletic fields, parking lots] are separated by a highway, and require the children to cross the highway on foot to access the facilities.” The congregation’s Hebrew School does not meet these criteria. Therefore, no school speed limit is permitted. There is a planned drop-off and pick-up for the building, and typical scheduling means that the Hebrew School begins soon after regular public school days end. There are also no school facilities on the other side of the street which might encourage pedestrian travel across Route 106. So, there is no reason why students at this Hebrew school would walk across Route 106. A school speed limit is not warranted and New York State DOT would not allow it.

Comment 44:

Is there any way that the Board would request to the DOT or look into possibility of extending the 40-mile an hour speed down by the Jericho School past where the temple would be so it would slow the traffic on 106? (Ms. Neiberg Smith, September 24, 2008 Transcript Page 26)

Response: Such a request is unrelated to this application. The Board may certainly make the request to NYSDOT, but reducing a posted speed limit does not always correlate with lowering travel speeds.

3.7.5. High Holy Day Traffic

Comment 45:

What's a High Holiday? How many are there? (Mr. Eckleburry, December 4, 2008 Transcript Page 23)

Response: The High Holidays, or High Holy days (terms are interchangeable), are the most holy days of the Jewish calendar, and the days on which a synagogue has a higher level of attendance than you would expect on other days. For this proposed Reform congregation, there are two High Holidays a year which always occur in September or October, plus the two evenings before each calendar day, for a total of four calendar days each year with higher than typical attendance.

Comment 46:

How many buses do you anticipate on the High Holy days, one bus? Like a big school bus, yellow school bus? (Deputy Mayor Juul-Nielsen, September 24, 2008 Transcript Page 9)

Response: The DEIS traffic study discussed a condition where 25-30 people would use each bus. The FEIS Traffic Analysis and Commentary (Appendix E) analyzed a condition where 25 people would use each bus. Although specific numbers cannot be precisely determined at this time, it is anticipated that there would be 32 bus trips each way, for a total of 64 bus trips on each High Holy day, with a total ±800 people using the buses. In either calculation (25 or 30 people per bus), there is no significant traffic impact from these buses. The buses could certainly be larger to accommodate more people per bus, which would mean fewer buses overall.

Comment 47:

What's the maximum [number of] cars allowed, 90, one for each space, right? Wouldn't 90 cars slowing up and going into one location affect 106? (Deputy Mayor Juul-Nielsen and Trustee Miller, September 24, 2008 Transcript Page 12)

Response: Given the proposed access plan containing both left and right turn dedicated lanes for entering vehicles, the entry of site traffic will not delay traffic on Route 106. Exiting traffic delays will be on-site and not have any effect on Route 106,

Comment 48:

In a little more detail, when you say, "no impact," could you explain that a little bit further? (Trustee Fine, September 24, 2008 Transcript Page 11)

Response: At the September 24, 2008 DEIS hearing, the applicant's traffic engineering expert explained that he meant that the DEIS Traffic Study indicated no changes in Level of Service. The Village traffic consultant believes that a more appropriate term would have been "no significant impact."

Comment 49:

Could you speak to the fact for the High Holy days there are 90 spots available. What mechanism is in place, if 90 spots are taken and I am running late and I get to the synagogue and I want to go in and I don't have time to get up to LIU, what mechanism is in place to prevent that kind of issue where someone needs to get in or wants to get in? (Trustee Marks, September 24, 2008 Transcript Page 9)

Provide a standard formalized plan for on the high holy days and any other time where there the potential to overflow the parking lot; whether a wedding, Bar Mitzvah, or the High Holy days. (Trustee Marks, September 24, 2008 Transcript Page 11)

Response: The applicant intends to assign each family a pass to either park at the site or to park at LIU on the High Holy days. Most congregants would be given a pass to park at LIU. The number of on-site parking passes would be capped at “10 fewer spaces than the capacity of the on-site parking lot” and therefore there would no High Holiday overflow. The congregants would know ahead of time whether they would be allowed or not allowed to park on the site, and “running late” would not allow on-site parking without a site-parking-pass. For Bar/Bat Mitzvahs, there is no anticipated overflow parking. Especially when compared to typical services, many (if not most) of the guests at such events are 12-to-14-year-old friends of the 13-year-old honoree. They are too young to drive, and do not generate a per-person demand for parking. Rather, they are driven in groups of 1-4 at a time by adults who drop them off and leave. Wedding event parking would also not be expected to fill the parking lot beyond its capacity. At a rate of 2.3 people per vehicle (based on numerous Cameron Engineering observations), 249 possible attendees equate to a parking demand of 108 parking spaces. The 120-space lot (an increase over the 90 spaces on the Site Plan that was current at the DEIS hearing, as discussed in Section 2) would be able to accommodate the corresponding number of parked vehicles on the site while leaving a sizeable cushion of at least eleven (11) percent, and therefore there would be no wedding-related overflow beyond the site’s paved and overflow spaces.

Comment 50:

Has the group then considered or discussed what route they would be taking to

and from LIU on the High Holy days? I don't know how to exactly word the next part, but it would seem to me logical that using 106 and 25A would be less of invasion to the village then going through the local streets. (Trustee Marks, September 24, 2008 Transcript Page 10)

Response: Buses from LIU to the synagogue would travel east on Northern Boulevard and then south on Route 106, to make the southbound left turn directly into the synagogue property. Leaving the synagogue, the buses on the High Holidays or any other special days when additional parking is needed above and beyond the parking spaces set forth on this plan, would travel on Route 106 north to 25A and take a left at 25A, then west to LIU. The applicant's engineers have visited the area and this travel route is currently used by at least five different sets of school buses. The applicant agrees that using Routes 106 and 25A yield faster travel times compared to using local streets. Since public schools are closed on the High Holidays, the additional shuttle bus trips would be less than what occurs during typical school days.

Comment 51:

Will there be valet parking on the High Holy days? (Deputy Mayor Juul-Nielsen, September 24, 2008 Transcript Page 9)

Response: No valet parking is proposed as the plan is to use LIU parking for overflow (see response to Comment 49).

Comment 52:

Please describe the steps you took to evaluate the availability of parking at the Long Island University facility which undoubtedly has its own parking issues. (Mr. Leventhal, September 24, 2008 Transcript Page 9)

What is the LIU connection? (Mr. Eckleberry, September 24, 2008 Transcript Page 23)

Response: LIU has no classes on the High Holidays, and therefore has no parking issues on the days in question. The applicant's engineers observed the traffic conditions at the LIU campus during High Holiday services in 2006. They tabulated the schedule of services, observed the numbers of vehicles associated

with the congregation, observed the numbers of people per vehicle, and correlated the results to the number of attendees. LIU is more than adequate to handle the parking associated with the High Holidays, even with projections of growth in the number of congregants.

Comment 53:

That's fairly arbitrary because the date keeps changing. (Deputy Mayor Juul-Nielsen, September 24, 2008 Transcript Page 10)

Response: It is correct that the High Holiday dates change on the secular calendar, but this does not affect High Holiday traffic or parking conditions. Public schools and the LIU campus are closed on the High Holidays no matter when they occur on the secular calendar. The applicant's engineers made their observations at LIU during the High Holy days. Currently, when the congregation has its High Holiday services at Hillwood Commons at LIU, with everyone parking at LIU, there is more than enough parking. The future High Holidays parking needs at LIU will be even smaller, because some congregants will be allowed to park at the synagogue, as discussed in the response to Comment 49.

Comment 54:

What is the duration of your agreement with Long Island University? (Mr. Leventhal, September 24, 2008 Transcript Page 11)

Response: The agreement is open-ended; it has no end date and therefore does not have a defined duration. In case one day LIU decides to terminate the agreement, the applicant is willing to work with the Jericho School District regarding alternate use of the Jericho Middle-High School for High Holiday parking.

Comment 55:

If a bus is going to be on that turning lane at Brookville Road that means that other cars can't get in there. These cars are going to be stopping on 106. (Mrs. Elizabeth Gilmartin, September 24, 2008 Transcript Page 21)

Response: As discussed in Section 2, there is no longer a new southbound left

turn lane at this intersection due to the newly proposed median opening and southbound left turn lane into the site; the comment is now no longer applicable.

Comment 56:

Was there any consideration of contracting with the Old Brookville Police Department to provide traffic control on your peak days and times? (Mr. Leventhal, December 4, 2008 Transcript Page 29)

Response: The Old Brookville Police Department has said they have adequate capacity to provide response services. Since there will be a parking management plan for the High Holidays, there should not be a need for police to provide traffic control. However, if actual operation indicates that this would be helpful, the congregation will consider contracting with the Old Brookville Police Department to provide High Holiday traffic control.

3.8. Traffic – Parking

Comment 57:

Will there be parking on 106? (Deputy Mayor Juul-Nielsen, September 24, 2008 Transcript Page 6)

People will take the ticket and park on 106 (Mr. Scall, September 24, 2008 Transcript Page 22)

Is there anything that the town can do so that they don't park on Francis Lane or Kirby Lane by coming into our neighborhoods to park? (Mrs. Neiberg Smith, September 24, 2008 Transcript Page 24)

Response: The applicant has spoken to a number of residents who expressed this concern. There will be no parking permitted on Route 106, just as there is no permitted parking on Route 106 now. There will be “No Stopping” signs installed on Route 106 near the proposed site driveway, as shown on the project site plans. Given the high travel speeds on Route 106, there is no reason to expect that congregants would ever want to park their vehicles on this road, especially since there will be no room to do so. The congregation will need to follow its own rules: unless the member has been given a ticket to park at the synagogue, he/she will be required to park at LIU and take a bus back to the

synagogue. This is the safest and most reasonable scenario, and will prevent congregants from parking in area neighborhoods or on Route 106.

Comment 58:

Would people be allowed to use the grass to park? When would these spaces be needed? (Trustee Marks, Deputy Mayor Juul-Nielsen, September 24, 2008 Transcript Page 13)

Response: There are 63 overflow parking spaces delineated on the Site Plan as grass pavers (blocks that support the ground but allow grass to grow through). There would be no other parking on grass. On the normal Friday and Saturday services, there would not be a need to park in the overflow parking areas. The overflow grass parking area is provided in case a particular event is busier than typical weekly events but it will only be used on rare occasions.

Comment 59:

Are the on site spaces sufficient for the volume on Bar Mitzvah days and other special events days other than the High Holy days? (Mr. Leventhal, September 24, 2008 Transcript Page 14)

The concern of the traffic is 90 spots for a congregation of 150 or 200 doesn't work. I would like to see an overflow area on the property instead of the buses from LIU. There will be more than two or three days a year this synagogue will be used for full capacity. You have Bar Mitzvahs that might happen every Saturday morning, Havdalah services, baby namings on Tuesday, you might have, whatever, so the temple is used more than the occasional practicing Jewish holidays. (Mr. Richard Entel, December 4, 2008 Transcript Page 21)

Response: In response to the Village's Traffic Consultant's recommendations, thirty additional overflow spaces were added to the Site Plan. The 120 on-site spaces will accommodate 250 to 300 people depending on vehicle occupancy, thereby addressing the services, school and other activities, aside from the High Holidays. For the High Holidays, the synagogue would utilize shuttle buses to LIU. As mentioned in responses to earlier comments, the few synagogue-LIU buses on the High Holidays would yield smaller volumes than what currently occurs during typical school days. The use of buses to and from LIU is the safest and most reasonable scenario. Similar to most religious facilities, it is not physically possible to provide overflow parking for everyone who will

attend on the synagogue's peak days of the year.

Comment 60:

How will 150 cars be accommodated on site? (Deputy Mayor Juul-Nielsen, September 24, 2008 Transcript Page 13)

Response: There is no need for 150 vehicles on this site. The peak site need is maybe 108 vehicles during the busiest non-High Holiday time. The 120 spaces will provide room for this number of vehicles to park on the site.

Comment 61:

Will use of valet parking still allow the fire and ambulance equipment to get in and have good access to the synagogue? Will it block the entrance to the facility? (Deputy Mayor Juul-Nielsen, September 24, 2008 Transcript Page 13)

Response: As thirty additional parking spaces have been provided, valet parking is no longer being proposed.

Comment 62:

I note that the driveway proposed, in comparison to the lot next door, which the lot next door has a driveway encroachment 15 feet width; the driveway proposed on the temple side is approximately 30 to 110 feet wide, actually as wide as 106, perhaps, even including the bicycle path or whatever it is. So when the question was raised as to where the extra cars could be parked, it appears that it's not unlikely that people will park on either side of that driveway if they come late for service and they don't have time to go park somewhere else. I want to know if there is some limitation as to parking on that particular driveway. Even if you have cars on either side there is other width for the car to go through the middle to get to the parking lot? If that's going to be permitted or not permitted, and if so, why? Thank you. (Mr. Renos Kourtides, September 24, 2008 Transcript Page 19)

Response: The driveway is 25 feet wide to accommodate two-way traffic with people coming in and out. This is the New York State standard design for a facility of this type. The flare where the driveway meets Route 106 is to ensure an adequate turning radius for entering and exiting right turns – again, designed according to New York State standards.

Parking would not be permitted along the driveway, and there will be no need to park on the driveway.

Comment 63:

That's why I asked for what a specific plan would be, a formalized plan would be on the High Holidays or during an event where they anticipate a large number of congregants so the Board has a formal plan to consider so it is not something that is haphazard. I think it would be wise and I think we would probably in the plan state that the Oyster Bay Police, or Brookville Police, are to patrol so they could step up the patrol during those High Holy days. (Trustee Marks and Deputy Mayor Juul-Nielsen, September 24, 2008 Transcript Page 24)

Response: The High Holiday parking plan is discussed in the response to Comments 9 and 50. The Village of Old Brookville Police Department provided the applicant with a signed letter (dated June 5, 2008) attesting to the Department's adequate capacity to provide response services for the proposed synagogue, including during the High Holidays. An updated letter was requested to confirm the Police Department's ability to provide services for the site and the revised site plan parking and access, and the revised occupancy calculations. The Department signed and provided this letter on July 2, 2010. The letter is included in Appendix B.

Comment 64:

The FEIS should fully explain any arrangements for parking and traffic management during High Holy days and any other projected highly-attended services and/or other events, programs, etc. (e.g., nursery school). The projected number and frequency of such events should be confirmed. Further, the FEIS should include written documentation, with all relevant conditions and terms, of any agreements for use of other property for parking. (Letter from Freudenthal & Elkowitz Consulting Group, Inc. dated December 29, 2008).

Response: The arrangement for High Holiday parking has been described in the above comment responses: only people with passes will be permitted to park at the synagogue during the High Holidays. Everyone else will park at LIU and take a bus back to the synagogue. This will be enforced by on-site personnel; non-ticket holders will not be permitted to park at the synagogue. The High Holidays occur on two evenings and the

two following calendar days, each year. All other events will be adequately accommodated with the 120 on-site parking spaces; these events will occur sporadically and not on any particular annual frequency. The nursery school will not need a special parking plan or traffic management plan. The agreement with LIU is provided in Appendix D.

3.9. Wetlands

Comment 65:

The FEIS should describe the methodology used to determine if wetland features exist in the areas of stormwater ponding should be provided. In addition, a discussion regarding impacts to identified species, habitat, hydrology and soils should be provided. The qualifications of the personnel performing the requested analysis should be included in the FEIS. (Letter from Freudenthal & Elkowitz Consulting Group, Inc. dated December 29, 2008).

Response: The NYS DEC (<http://www.dec.ny.gov/lands/305.html>) defines wetlands: “The NYS DEC Wetlands (swamps, marshes, bogs, and similar areas) are areas saturated by surface or ground water sufficient to support distinctive vegetation adapted for life in saturated soil conditions.”

The two depressions on the site were constructed as stormwater recharge basins and continue to function as such. They do not meet the DEC definition of a ‘wetland’ as the soils are not saturated, nor is there the kind of vegetation typical of wetlands. Organic material has accumulated in the basins due to a lack of maintenance, which usually involves periodic scraping of the bottom to preserve infiltration rates. The presence of the organic material has slowed percolation of stormwater through the soils, which has led to intermittent wet conditions and growth of opportunistic plant species.

Reschke (1990) does not include a Recharge Basin community in *Ecological Communities of New York State*. Edinger et al. (2002) in their “*Draft Ecological Communities of New York State*” include “Water Recharge Basin” as a Palustrine Community with the following definition:

Water recharge basin: the aquatic community of a constructed depression near a road or development that receives runoff from paved surfaces and allows the water to percolate

through to the groundwater, thereby recharging the groundwater. These basins are intermittently flooded during periods of heavy precipitation.

The proposed development will lead to somewhat greater flow of stormwater to the basins. The basins will therefore be deepened to accommodate the added stormwater volume. The plant communities of the basin floors will be removed during the excavation. Coarser soils will be exposed on the basin floors following excavation. Infiltration rates will increase as a result. The plants along the basin sides will contribute to the reseeded of the basins floors. Grass species adapted to somewhat drier conditions will likely replace the community present today.

David Berg, AICP performed the analysis. He has an undergraduate degree in geology and a graduate degree in Marine Biology. He has evaluated conditions of and impacts to ecological communities on Long Island for Cameron Engineering for over ten years.

3.10. Visual Impacts and Community Character

Comment 66:

The FEIS should include a description of the overall visual impacts (i.e., from public roadways and proximate residences) to the area, including proposed landscaping (at time of planting and at five years). (Letter from Freudenthal & Elkowitz Consulting Group, Inc. dated December 29, 2008).

Response: The following discussion describes the views of the proposed site development as a synagogue from the properties surrounding the site, which are depicted in Figure 3-2. It is noted that if the property was developed with two residential lots as allowed by existing zoning, these homes could be located 50 feet from the property line (closer than the proposed synagogue) and could include outdoor amenities such as parking courts, pools, tennis courts and playgrounds which would also be visible from the neighboring properties. The height of the homes could be 35 feet, and the synagogue is a similar height (35.75 feet, less than the Code allowed maximum of forty feet). This is substantiated by Figure 3-2. (All Figures are found at the end of this Chapter). The top four photographs in this figure show current views of existing surrounding homes from the project site during the winter. The surrounding homes are partially visible through the tree branches. The bottom two images show views of the synagogue from the north and east. Partial views are visible through the trees and are not dissimilar to the views of

existing homes.

Views will be mitigated by proposed plantings as described below. The white pines will be planted at six to eight foot height, will grow up to fourteen to eighteen foot height in five years, and at full maturity will reach twenty-five to thirty feet. The deciduous trees will be planted at ten to fourteen feet and will grow up to sixteen to twenty feet height in five years, reaching mature heights of forty to fifty feet in ten years.

Views from public roadway: The DEIS included visual depictions of the views from Route 106 at 5 years. The planting plan provided in the DEIS included approximately 30 trees along the Route 106 frontage, along with approximately 150 shrubs. Figure 3-3 shows that at planting, there would be little screening of the building, but most of the building would be screened within 5 years and essentially all of the building would be screened at ten years.

An optional planting plan is provided (Figure 3-4) that would increase the number and initial size of plantings so that the initial screening would be enhanced as shown in Figure 3-5. This plan includes 23 deciduous trees, 56 evergreen trees, and 102 large shrubs. The size of the white pines would be increased from six to eight feet at planting to ten to twelve feet at planting. The Leyland Cypress would be in three sizes, from “ten to twelve feet” up to “sixteen to eighteen feet” at planting. The size of the deciduous trees would be increased from ten to fourteen feet at planting to twenty to twenty two feet at planting. The evergreen shrubs would be planted at four to eight foot heights. This would provide significantly more initial screening, so that full screening would be achieved sooner, but comes at a significant additional cost of approximately \$60,000 to \$70,000.

In either planting scenario, the applicant proposes to plant the Route 106 landscape in the beginning of the construction process to give the trees and shrubs additional time to grow, providing a one to two foot growth of plant material prior to completion of construction. Water service would be installed at the start of construction and additional costs would be incurred to install a protective fence/barrier to the landscape zone.

Views from adjoining residences: The northern frontage shares a property line with three residential lots. The major elements along this frontage are the existing pond and proposed parking area. The parking area is set back 50 feet from the property line, and the homes are setback 244 to 298 feet from the property line, for a combined distance of approximately 300 to 350 feet. This frontage has existing greenery on the residential

properties and on the synagogue property. On the synagogue property alone, there are 7 spruce with year round foliage and over 40 maples that will buffer the parking area in the warmer months. In the winter, when the trees do not have leaves, there would be partial views of the synagogue building as shown in Figure 3-7. This is similar to the current situation in that the existing homes can be partially viewed from the project site (Figure 3-6).

The eastern frontage shares a property line with two residential lots and a third is in the vicinity. The major elements along this frontage are a service road, the rear of the synagogue building and a small prayer terrace. The homes are setback 173 to 347 feet from the property line, with the building over 300 feet from these residences. This frontage has existing greenery on the residential properties and on the synagogue property. On the synagogue property alone, there are approximately 75 deciduous trees that will buffer the area in the warmer months. In the winter, when the trees do not have leaves, there would be partial views of the synagogue building (Figure 3-8), again, as there are today of the existing homes (Figure 3-6). No significant change is expected over time as the further growth of the deciduous tree canopy would not affect the views below or through the bare branches.

The southern frontage shares a property line with one residential lot. The major elements along this frontage are the side of the synagogue building including the sunken patio and terrace, and the playground, all a minimum of 50 feet from the property line. The home is setback 50 feet from the property line, for an overall distance of over 100 feet between the synagogue building and the residence. This frontage has minimal existing greenery and therefore a screen of 61 staggered white pines is proposed on the landscape plan. These will be planted at six to eight foot height and will grow to approximately fourteen to eighteen feet within 5 years and twenty-five to thirty feet at maturity. Figure 3-9 shows the views at planting and at 5 years. While initially the synagogue will be visible, as the trees grow, the views will become more shielded.

Comment 67:

The FEIS should evaluate the consistency of the proposed development with the character of the community, with particular attention paid to proximate development. (Letter from Freudenthal & Elkowitz Consulting Group, Inc. dated December 29, 2008).

Response: As discussed in the DEIS, the elements that contribute to community character

include land use and zoning, visual impacts, special features, such as views, architectural style and natural resources, traffic and noise. As discussed in the various sections of the DEIS, there are no significant impacts to any of these elements, and therefore community character is not anticipated to be significantly impacted. More specifically:

- Land Use and Zoning – the land use is compatible and the project complies with zoning with the granting of a special permit. The code of the Village of Muttontown permits places of public worship within the E-3 district according to a special use permit. Religious uses are subject to standards and requirements, all of which are intended to ensure the compatible integration of a church, synagogue or other place of public worship within a residential district. Within a one-half mile radius of the project site, the land is zoned primarily for residential use; however, other uses such as a large public school have been previously established.

The immediate surrounding land uses are an arterial highway (to the west) and seven residential homes: three to the north, three to the east, and one to the south. NYS Route 106, directly to the west of the project site, is a north-south State arterial highway that has two lanes in each direction, with turning lanes at some intersections. The posted speed limit in the vicinity of this site is 55 mph and the Average Annual Daily Traffic (AADT) volume is reported to be 25,700 vehicles per day (vpd) between Jericho Turnpike and Muttontown Road. The site size, location, and layout are appropriate for a religious use because the building size is comparable to the two single-family homes that could be constructed in accordance with zoning, there is excellent access onto Route 106, and the building is centered on the site and maintains greater setbacks than required.

- Visual impacts, views and architectural style – the building is set back from all property lines and is screened with vegetation, limiting the change in view from the roadway and adjacent properties. The architectural style of the synagogue is modern and fits within an established tradition of sculpturally-expressive sacred architecture.

There is not one single type of architectural style within the Village. Figure 3-10 and Figure 3-11 show that there are a wide range of residential and non-residential architectural styles found within the Village. It is the applicant's opinion that the

synagogue is neither too similar nor too dissimilar to the architectural styles exhibited in the Village.

The synagogue building itself is 283 feet from Route 106, 92 feet from the property line and 142 feet from the residence to the south, and 168 feet from the north property line, 120 feet from the east property line, and a minimum of 300 feet from the other six surrounding residences. The visual impact would be similar to the situation where two modern homes were constructed on this site in lieu of a synagogue. In fact the two homes could be much closer (fifty feet as opposed to 92, 120 and 168 feet) to the neighboring property lines. Views will be limited from Route 106 and neighboring properties by existing vegetative screening which will be supplemented with additional landscaping. The building's architecture will be reviewed by both the Village Board of Trustees and the Village's Site and Architectural Review Board.

- Natural resources – there will be no significant impacts on sensitive species, but a portion of the site will be cleared to make room for structures, driveways and parking areas, as would be the case for construction of single-family homes.

- Traffic – The highest levels of activity were evaluated for impacts and safety as part of a traffic study contained in the DEIS and supplemented by additional analysis in Appendix E of this document. This analysis concludes that the synagogue, operated as analyzed and with the access proposed, can be operated safely and with little effect to traffic flow given the traffic signal retiming described in Appendix E, subject to NYSDOT concurrence. All parking needs will be completely accommodated on-site, with the sole exception of the High Holidays, when the use of LIU will completely accommodate all parking. The Site Plan has been revised to add 30 additional overflow parking spaces, which will ensure that all parking needs will be accommodated on the site. The curbing around the proposed median in front of the synagogue's main entrance is now flush curbing, traversable (if necessary) by shuttle buses and emergency vehicles. There will be a new northbound deceleration lane with a 45-foot entry radius, and a new southbound left turn lane into the proposed site driveway. These lanes will remove turning vehicles from the through traffic stream on Route 106, which will minimize any impacts to safety conditions. The new southbound left turn lane makes it unnecessary for site-related traffic to make a U-

turn at the Route 106-Brookville Road intersection, which also minimizes any safety-related impacts.

- Noise – The three residences to the north are 244 feet, 257 feet, and 298 feet from the property line. The closest activity on the northern portion of the project site is parking, which is located fifty feet from the property line. The synagogue building is a minimum of 168 feet from the northern property line. The three residences to the east are 173 feet, 235 feet and 347 feet from the property line. The closest activity on the eastern portion of the project site is parking, which is located fifty feet from the eastern property line. The synagogue building is a minimum of 120 feet from the eastern property line. The residence to the south is 50 feet from the property line. The closest activities on the southern portion of the project site are a sunken patio and a playground which are located fifty feet from the property line. The synagogue building is a minimum of 92 feet from the southern property line.

Therefore, any proposed outdoor activity on the site will be 100 feet from the residence to the south, and over 300 feet from the other six residences. Indoor activities will be even further away.

A detailed noise analysis was performed. Noise from traffic was compared against ambient noise levels measured on site, and no significant differences were found. Remedial measures consisting of solid barriers around three sides of the mechanical equipment will reduce noise from mechanical equipment to levels at or below the minimum ambient noise levels at the property line. Cumulative impact analysis showed that cumulative noise from Synagogue activities is unlikely to cause a disturbance at the property line and therefore will have no negative impact on the neighboring residences themselves. See Section 3.11 below for further discussion of cumulative noise impacts.

3.11. Noise

Comment 68:

The Environmental Noise Impact Assessment of New Synagogue, prepared by WSP Acoustics (USA), last revised June 12, 2008, which is found in Appendix E of the DEIS, analyzes the theoretical impact of various proposed noise sources (i.e., HVAC equipment,

worshippers, loudspeakers) onto neighboring properties. The assessment should be expanded include an analysis of the cumulative noise impact upon neighboring properties for those noise sources evaluated that could occur simultaneously. (Letter from Freudenthal & Elkowitz Consulting Group, Inc. dated December 29, 2008).

Response: A revised Noise Assessment which includes a cumulative impact assessment is provided as Appendix C and is summarized here. There are instances where more than one noise source will operate at once. The following assumptions were made:

- All traffic arrives before a service;
- There will be no children’s outside school activities occurring during a service;
- There could be children’s outside school activities occurring as people arrive for services;
- Children’s outside school activities will only occur during the daytime period of 8 am to 6 pm;
- High Holiday (Rosh Hashanah and Yom Kippur) and regular services can take place anytime up to 10 pm; however, only daytime high-holiday services require the use of the tent on the terrace.

The cumulative impact of more than one source is presented in Table 3-4. Two assessment positions were chosen which represent the closest points on the property line to neighboring residential properties. These are Position 1, at the property line directly to the south of the playground and Position 2, at the property line directly to the east of the HVAC installation. In each case the minimum ambient noise level measured on site during the period in which activity is expected to take place was used.

Table 3-4- Cumulative Noise Impact from Site Activity

Cumulative Noise Generators	Position 1 (south)	Position 2 (east)
Vehicles, HVAC units, playground and existing ambient	+2.5dB	+0.8dB
High Holiday Daytime Service, HVAC units and existing ambient	+2.8dB	+1.3dB
Outdoor terrace service; HVAC units and existing ambient	+2.5dB	+1.6dB

A 2-3dB increase in noise levels is barely perceptible to the average person. It can be seen that the cumulative noise levels will result in an increase in existing minimum ambient noise levels of less than 3dB. As such, cumulative noise from Synagogue

activities is unlikely to cause a disturbance at the property line and therefore will have no negative impact on the neighboring residences themselves.

Comment 69:

It appears that the decibel reduction calculations (i.e., 6 dB with a doubling of distance) may not be appropriate where the analysis begins to take such credit at less than 50 feet from the source. Specifically, Assessing and Mitigation Noise Impacts New York State Department of Environmental Conservation, last revised February 2, 2001, indicates, in pertinent part, that:

“At distances greater than 50 feet from a sound source, every doubling of the distance produces a 6 dB reduction in the sound.”

Accordingly, the DEIS may have taken credit for too great an attenuation of noise due to distance. (Letter from Freudenthal & Elkowitz Consulting Group, Inc. dated December 29, 2008).

Response: The NYSDEC document should not be the only reference, as it does not apply to all situations. The reference paper, which has been the cornerstone of research into noise propagation from noise sources and used by most (if not all) acoustic consultants and engineers, is E.J. Rathe, *Note on Two Common Problems of Sound Propagation* from the *Journal of Sound and Vibration*, 10(3), 472-476 (1969). In this paper, Rathe was able to show that a planar sound source (such as a loudspeaker) can be approximated as a point source at distances as close as L/π , where L is the largest planar source dimension. In the noise report, when assessing noise loss from the loudspeakers and from humans, a reference distance of 5 feet (i.e. 70 dB(A) at 5ft) was taken for all noise sources. It was then ascertained that at 5 feet these noise sources can be treated as point sources and as such the 20 log relationship (or 6dB per doubling of distance) is valid and accurate. If the maximum dimension of the source is 5 feet (in reality the speaker size is likely 12” diameter or less) then the far field (where it can begin to be treated as a point source) begins at only ~20” from the source. The 5 feet reference distance used for these sources is therefore valid as is the use of the 20log relationship.

The 6dB per doubling of distance relationship (the 20 log equation referred to) is a valid and industry accepted method for assessing noise reduction from point sources. People are always considered as point sources as the noise generating part (the voicebox and

throat cavity, etc.) is tiny compared with any distance from the source where the measurement is taken – even at 5 feet, the human voice still acts as a point source. As such, any distance loss from the source can be considered as $20 \log$ (source reference distance/distance to receive), or 6dB per doubling of distance, even with a reference distance of 5 feet as the source is already in the “far field” whereby dimensions of the source no longer play a part in its distance loss characteristics.

The same can be said for a speaker used for speech reinforcement. The speaker diaphragm is no more than 20” in diameter, which again is tiny compared with the distance it is measured over. Again, even at the 5-foot reference distance it is in the “far field” and as such can be treated as a point source.

The NYSDEC comments are designed to address the common practice of assuming that all noise sources are point sources, using the “6dB per doubling of distance” rule, and as such, overestimating the distance loss from a source. For example, it makes sense that a large cooling tower with a noise radiating area of $>100\text{ft}^2$ cannot be treated as a point source at only 5 feet away from it. In this situation, it is appropriate to consider the unit dimensions to determine where the near field ends and the far field starts (and where the source can then begin to be treated as a point source). For a cooling tower, this is probably 30-40 feet away from the unit, and so the 50-foot reference used in the NYSDEC is a good way of ensuring that even for the biggest items, excess losses are not taken.

In addition, all distances at which assessments are made are at least 50 feet from the source. Most are further away. Where a distance of less than 50 feet is used, this is a noise source reference distance. All sound pressure levels are quoted in terms of both the decibel level and the distance at which that noise level is measured. A sound pressure level without a reference distance is meaningless.

Using a reference distance less than 50 feet does not affect the distance loss calculation provided the distance loss calculation method is appropriate to the size of the source.

Take as an example the assessment of congregation noise. All the sources involved are very small compared with the distances over which they are being assessed. The human voice box is no more than a few cubic inches and the speakers used to broadcast the Rabbi’s voice are no more than 2 cubic feet each. As such, these are considered to be “point sources” and noise drops off at a rate of 6dB per doubling of distance away from

the source. The calculation for which is: $20\log(\text{source reference distance}/\text{distance to receive position})$. This is what was used in the report. It is the correct calculation for this type of noise and is the industry standard method for assessing noise reduction with distance.

For construction noise, all reference distances are given as 50 feet. All source noise levels are taken from *Regulation of Construction Activity Noise* (referenced in the Noise Report). At this distance, the size of the source is again small compared with the distance over which it is being assessed. At 50 feet, the equipment begins to act as a point source and so for every doubling of distance a 6dB reduction can be taken. In many cases, however, the assessment distance is also 50 feet, and as such, no additional noise reduction is taken. Where an assessment distance is more than 50 feet, the 6dB per doubling of distance relationship is used. Again, this is the correct calculation for this type of noise and is quoted in the comments (*Assessing and Mitigation Noise Impacts*, New York State Department of Environmental Conservation, last revised February 2, 2001).

For HVAC equipment, this is the only area where the 6dB per doubling of distance can't generally be used, as it would overestimate the loss. The unit is normally large compared with the reference distance. Even if the assessment distance is relatively large by comparison, the unit does not act as a point source for the first 15 or 20 feet away from the unit, and as such, the 6dB per doubling of distance does not hold true.

In this case, the manufacturer's quoted sound power level for the equipment is used with the dimensions of the units, rather than the sound pressure level and reference distance. Based on this information, a noise level at the assessment distance can be calculated. Table 9 in the Noise Report shows the noise reduction from 10 feet to 150 feet for each condenser unit using this method (calculating noise at 10 feet and then at 150 feet, based on the manufacturer's quoted sound power level for a 3' x 3' x 6' condenser). This reduction is 22dB. By comparison, using the 6dB per doubling of distance method, the noise reduction would have been 23.5dB, overestimating the loss.

For traffic noise impact, traffic needs to be treated differently to the individual fixed sources above. Although each vehicle entering or leaving the site is an individual source, there is one after another forming what is called a "line source." The distance-loss relationship from a line source is $10\log(\text{reference distance}/\text{assessment distance})$, which is a 3dB decrease per doubling of distance. Again, this is the industry standard method for

calculating noise reduction with distance from road traffic sources and is the correct method to use.

In conclusion, the calculation methods used throughout the report are based on the industry standard methods for calculating noise reduction with distance. The methods do not overestimate the losses, and as such, the levels quoted can be considered as accurate.