PROFFERS
PCA 86-W-001-10
PCA 86-P-089-6

August 25, 2003
October 10, 2003
October 21, 2003
November 10, 2003
December 1, 2003
December 15, 2003
December 31, 2003
January 12, 2004
January 14, 2004
January 23, 2004

Pursuant to Section 15-2.2303A of the Code of Virginia, 1950 edition, as amended, and subject to the Board of Supervisors approval of the Proffered Condition Amendment and Conceptual Development Plan/Final Development Plan Amendment, the Applicant/Owners, their successors or assigns, herein after referred to as "the Applicant" proffers the following. All previous proffers or development conditions which apply to the application property shall, as applicable, remain in effect as stated in the proffer statements dated July 25, 1988, and approved August 1, 1988 by the Board of Supervisors. Should there be any inconsistencies between these proffers and prior proffers, these proffers shall replace and supercede those prior proffers or portions thereof to the extent of said inconsistencies.

Paragraph A1a shall be added under Land Use PCA 86-W-001-2, RZ 86-P-089, CDPA 86-W-001-2 to read as follows:

A.1.a. The application property, which consists of Tax Map Parcel 55-2-((1))-15, also known as Land Bay A of the Government Center ("Land Bay A"), (collectively the "Property"), shall be developed in conformance with the Conceptual Development Plan Amendment and Final Development Plan Amendment (CDPA/FDPA) consisting of eighteen (18) sheets prepared by William H. Gordon Associates and dated June 2003, as revised through December 31, 2003. The existing interim athletic fields may remain until such time as development or earth storage or tree storage commences. A maximum of 667,926 gross square feet (exclusive of ADU's and ADU related density) of retail, residential and permitted accessory uses shall be developed on the property, as depicted on the CDPA/FDPA.

Paragraph 3 under Land Use PCA 86-W-001-2, RZ 86-P-089, CDPA 86-W-001-2 shall be revised to read as follows:

3. Heights of the buildings shall be in conformance with the CDPA/FDPA, with no portion of any building exceeding one-hundred and twenty (120) feet for Land Bays B, C and D and one hundred (100) feet for Land Bay A.

N 13° 46' 12" W, 131.00 feet to a point;

N 25° 45' 02" E, 67.89 feet to a point;

S 79° 24' 38" E, 117.15 feet to a point;

N 60° 47' 00" E, 172.93 feet to the point of curvature of a curve to the left;

210.53 feet along the arc of said curve having a radius of 318.28 feet and a chord bearing and chord of N 41° 50' 07" E, 206.71 feet respectively, to a point;

N 15° 09' 01" E, 100.79 feet to the point of curvature of a curve to the right;

112.83 feet along the arc of said curve having a radius of 290.25 feet and a chord bearing and chord of N 39° 39' 01" E, 112.12 feet respectively, to the point of compound curvature of a curve to the right and

35.31 feet along the arc of said curve having a radius of 235.35 feet and a chord bearing and chord of N 55° 05' 03" E, 35.28 feet

to a point on the southerly right-of-way line of aforementioned Fair Lakes Parkway;

thence with said southerly right-of-way line of Fair Lakes Parkway

S 82° 34' 38" E, 145.03 feet to a point and

S 35° 02' 02" E, 65.01 feet

to the point of beginning.

Containing 143,485 square feet or 3.29396 acres of land.

Consistent with the Fairfax County Zoning Ordinance, mechanical penthouses shall be permitted to exceed, respectively, the one-hundred and twenty (120) foot height or the one hundred (100) foot height provided that they meet the following standards as determined by DPWES:

- They comprise less than 25% of the roof of the building
- Said mechanical penthouses do not exceed twenty (20) feet in height
- Said mechanical penthouses are located in the middle of the building's roof
- Said mechanical penthouses are architecturally clad with materials of a texture and same/similar color compatible with materials on the building upon which they are situated.

All Final Development Plan Amendments for Land Bays B, C and D of the Government Center shall be the subject of public hearings before the Planning Commission and the Board of Supervisors and subject to final approval by the Board of Supervisors. Final Development Plan Amendments for Land Bay A shall be subject to the Planning Commission approval only.

Paragraph 5 under Land Use PCA 86-W-001-2, RZ 86-P-089, CDPA 86-W-001-2 shall be revised to read as follows:

5. All signage other than that required by the Virginia Department of Transportation ("VDOT") for the subject property shall be addressed through a Comprehensive Signage Plan pursuant to Section 12-210 of the Zoning Ordinance. No retail signs in Land Bay A that are visible from I-66 shall exceed 200 square feet each or as they may be further limited by a Comprehensive Sign Plan. No signage, including signage visible from I-66, shall consist of exposed neon tubing.

Paragraphs 11-21 under Land Use PCA 86-W-001-2, RZ 86-P-089, CDPA 86-W-001-2 shall be added as follows:

11. Pursuant to Paragraph 4 of Section 16-403 of the Zoning Ordinance, minor modifications from the approved CDPA/FDPA may be permitted as determined by the Zoning Administrator. The Applicant shall have the flexibility to modify the layout shown on the CDPA/FDPA for Land Bay A provided such changes are in substantial conformance with the CDPA/FDPA and proffers, and do not increase the total square footage, decrease the minimum amount of open space or distance to the periphery of Land Bay A shown to be provided on the CDPA/FDPA.

12. Non-residential buildings and landscaping shall be generally in character with the elevations and typical landscaping details as shown on Sheets 8, 11, 12, and 18 of the CDPA/FDPA, as determined by Urban Forester of DPWES for landscaping and by DPWES for building elevations.

13. If provided, all exposed facades of the parking structures shall be constructed of either masonry, stone, metal panels or pre-cast or poured-in-place concrete and shall be

designed to be consistent with the facade treatments (in terms of color, material and/or architectural treatments) of the buildings which they serve, as determined by DPWES.

14. The entry, plaza and courtyard areas shall include specialty paving materials, enhanced landscaping, seating areas and site amenities as generally illustrated on Sheets 9, 10, 11, 12 and 13. The design of these entry, plaza and courtyard areas, including pedestrian and vehicular connections to and through the plazas, are subject to modification by final engineering and architectural design without the requirement for an FDPA in accordance with Par. 4 of Sect. 16-403 and in substantial conformance with the CDPA/FDPA.

15. Uses not permitted for Buildings S-1, S-2, and S-3 include: drive through uses; home improvement store with or without a plant nursery, lumber yard or other large raw building material components; high volume, large discount store; or more than 24,000 square feet of the total non-residential square feet as fast food restaurants and/or as eating establishments. The maximum size of any single use in S-1, S-2, or S-3 shall be 70,000 square feet.

16. The architectural design of shopping center buildings S-1, S-2 and S-3 shall include elements which are architecturally compatible in terms of color, materials, and/or architectural details with the Galyans building on Tax Map 55-2((1))14B3, as reflected on Sheet 18 of the CDPA/FDPA as determined by DPWES.

17. There shall be no outdoor storage in Land Bay A.

18. As long as the Chantilly Youth Association remains as a lessee of a portion of a property, it shall be provided written notice, not less than thirty (30) days prior to start of clearing and grading or earth or tree storage activities on any portion of the property, that such clearing and grading or earth or tree storage is to commence. The Applicant shall provide the Chantilly Youth Association not less than thirty (30) days notice to vacate use of the site.

19. Telecommunication equipment, if any, shall be mounted not to extend above the top of the highest portion of the penthouse structure, and shall be flush mounted and of the same color as the penthouse, or mounted as far as possible from the outer edge of the building and screened to minimize visibility from the ground, as determined by DPWES. Equipment cabinets shall be located on the roof or internal to the building; if located on the roof, they shall be shielded by a screen wall. There shall be no signs on site to advertise the telecommunication facility (ies).

20. The Applicant has conducted a Phase II archeological study of that portion of the Property identified as site 56-1#P6 and registered with the Virginia Department of Historic Resources as number 44FX2723, the results of which Phase II study shall be submitted to the Fairfax County Park Authority Cultural Resource Protection Group (the "Group"). Based on the Phase II study, the Group has determined that a Phase III archeological study is warranted on a portion of site 56-1#P6. The Applicant, prior to clearing and grading on such portion, shall complete a Phase III data recovery of such portion for review by the Group. The Applicant shall submit a Phase III Data Recovery

Report for review and approval by the Group prior to site plan approval. The Applicant shall permit the Group and its agents, at their own risk and expense, to enter the Subject Property to monitor the property at the time of initial clearing and grading and to recover artifacts, provided that such testing, studies, and removal do not unreasonably interfere with or delay the Applicant's construction schedule.

21. The area along the R-2 buildings' frontage on Fair Lakes Parkway shall include supplemental landscaping to the maximum extent feasible, as determined by the Urban Forester.

Paragraph 1A under Land Use PCA 86-W-001-2, RZ 86-P-089, CDPA 86-W-001-2 shall be added as follows:

1a. All residential buildings in Land Bay A shall meet the thermal standards of the CABO Model Energy Program for energy efficient homes, or its equivalent, as determined by DPWES for either electric or gas energy homes as applicable.

Paragraph 6a under Residential PCA 86-W-001-2, RZ 86-P-89, CDPA 86-W-001-2 shall be added as follows:

6a. The Applicant shall provide 6.25% of the R-2 units as affordable dwelling units, as defined by Article 2 of the Zoning Ordinance. As depicted in the tabulations on the CDP/FDP, the FAR increase over 0.45 (667,926 square feet) for the Land Bay A portion of the Property shall consist of ADU's or bonus units as defined in Section 2-800 of the Zoning Ordinance. If Building R-1 does not have any ADU's required, at the time of site plan approval Applicant shall choose to either a) provide 5% of the total units in R-1 as ADU's or b) donate ½% of the projected sales prices of each unit in R-1 to the Housing Trust Fund prior to issuance of first building permit in R-1. In the event that the R-1 units are available for rent, the Applicant's ½% contribution would be based on the total development cost of Building R-1 as determined by the Applicant in consultation with the staff of the Fairfax County Department of Housing and Community Development and the Department of Public Works and Environmental Services.

Paragraphs 8-15 under Residential PCA 86-W-001-2, RZ 86-P-89, CDPA 86-W-001-2 shall be added to read as follows:

8. Pursuant to Section 6-209 of the Zoning Ordinance the Applicant shall provide the recreational facilities to serve the Application Property. At the time of each site plan approval involving residential units, the Applicant shall demonstrate that the value of any proposed recreational amenities within the respective site plan area is equivalent to a minimum of $955.00 per market-rate residential unit on such site plan as required by Article 6 of the Zoning Ordinance. To the extent the Applicant's expenditure for onsite recreational facilities totals less than $955 per market-rate residential unit on such site plan, the Applicant shall, at the time of such site plan approval, contribute an amount equal to the difference in total recreational funds expended (as compared to $955 per market-rate unit for that site) for onsite amenities to the Fairfax County Park Authority for use for athletic facilities and fields at the Popes Head Estate Assemblage. If the

recreation facilities in R-1 are not available to residents of R-2 the $955 requirement shall be calculated separately and no credit shall be provided for recreation facilities provided in R-1 towards the minimum requirement in R-2. At the time of each such site plan approval the Applicant shall contribute $378 per market-rate residential unit on such site plan, above the $955 per market-rate unit, to the Fairfax County Park Authority for use for athletic facilities and fields at the Popes Head Estate Assemblage.

9. At the time of issuance of the initial building permit for R-1, the Applicant shall provide to the Fairfax County Board of Supervisors a contribution of $7,500 per student for the students projected to be generated in R-1. At the time of issuance of the initial building permit in R-2, the Applicant shall provide a contribution of $7,500 per student for the students projected to be generated in R-2. Such contributions shall be available for use in any of the public schools in Fairfax County. The number of students projected to be generated shall be based on the student yield ratio of 0.102 students per unit for units in the R-1 building and 0.227 students per unit for units in the R-2 buildings.

10. No temporary signs (including "popsicle" style paper or cardboard signs) which are prohibited by Article 12 of the Zoning Ordinance, and no signs which are prohibited by Chapter 7 of Title 33.1 or Chapter 8 of Title 46.2 of the Code of Virginia shall be placed on or off-site by the Applicant or by any builder or retail user, or at the Applicant's or any builder's or retail user's direction, to assist in the initial marketing and/or rental of dwelling units or advertising of retail activity on the subject property. The Applicant shall direct its agents and employees involved in marketing the Property, or advertising of retail activity, to adhere to this proffer.

11. A covenant shall be placed on each dwelling unit that prohibits the use of the garage for any purpose which precludes the storage of vehicles. This covenant shall be recorded among the land records of Fairfax County prior to the sale of lots and shall run to the benefit of the homeowners' association and to the Board of Supervisors. Prior to recordation, the covenant shall be approved by the Fairfax County Attorney's office. The homeowners' association and leasing documents shall expressly state this use restriction.

12. The HOA documents for, and the contract of sale to the initial purchaser of each unit in the R-2 buildings shall expressly state that the HOA shall be responsible for, and HOA reserves shall be established for the maintenance of, (i) all private streets within the development; and (ii) the noise attenuation walls adjacent to Interstate 66 and West Ox Road (if not located within the right-of-way and accepted by VDOT for maintenance).

13. The residential architecture of buildings in R-1 and R-2 shall be generally in character with the elevations as shown on Sheets 16 and 17 of the CDPA/FDPA. The two unit types in R-2 shall consist of compatible colors, materials and/or architectural details, as determined by DPWES, and as qualified in proffer 14 below. If the alternative Building R-1 layout is provided, the architecture shall be consistent on all sides of the building.

14. The following shall be provided within R-2:

a. The sidewalk on the south side of Liberty Bridge Road shall be brick.

b. Pedestrian sized street lights shall be installed along the south side of Liberty Bridge Road.

c. Driveways along Liberty Bridge Road shall be concrete and shall include enhancements such as: exposed aggregate, inlaid brick and/or alternate scoring patterns.

d. Regardless of the CDPA/FDPA, the rear facades of all R-2 units shall have brick or masonry siding on the first level.

e. Regardless of the CDPA/FDPA, all side elevations (except the four side elevations adjacent to other interior side elevations west of Cider Hill Road) shall have enhanced siding as depicted, respectively, on Sheet 16 (the "High Profile" elevations) and/or on Sheet 17 of the CDPA/FDPA.

f. Bricks of the same color family shall be utilized for all of the stacked units with brick components.

g. Roofing materials of the same color family shall be utilized for all stacked units.

15. All residential driveways in R-2 shall be concrete.

Paragraph 3 under Stormwater Management PCA 86-W-001-2, RZ 86-P-89, CDPA 86-W 001-2 shall be revised to read as follows:

3. The stormwater management facilities required to be located on the Property by the applicable F.L. Promenade agreements shall be constructed in accordance with the requirements of the Public Facilities Manual and the terms of those agreements, as modified by the qualifications described in the Memorandum dated June 17, 2002 from Carl E. Bouchard to Michelle Brickner attached hereto as Attachment 1 and incorporated herein to the proffers. Additional plantings that can withstand periodic inundation from run-off shall be provided to the maximum extent feasible within cleared areas of the pond basin to retain an aesthetic, naturalized appearance for the stormwater management ponds, to enhance the habitat potential, and to minimize maintenance, subject to approval of the Urban Forester and DPWES.

Paragraph 1(a) under Environmental PCA 86-W-001-2, RZ 86-P-089, CDPA 86-W-001-2 shall be added:

1.a. Landscaping in Land Bay A shall be provided in conformance with the CDPA/FDPA. At the time of planting, deciduous trees shall have a minimum 2 ½ to three (3) inch caliper and evergreen trees shall be a minimum of seven (7) to eight (8) feet in height. Where consistent with County policies regarding planting in stormwater management ponds, and in those areas behind the pond embankment that need to be cleared, as determined by DPWES, additional plantings shall be provided to the maximum extent feasible as determined by the Urban Forester.

Paragraph 2(a) under Environmental PCA 86-W-001-2, RZ 86-P-089, CDPA 86-W-001-2 shall be revised to read as follows:

2.a As shown on the CDPA/FDPA the following landscaped buffers shall be provided:

- A minimum of one-hundred and ten (110) feet wide along the southern boundary of Land Bay B.

- A minimum of one-hundred (100) feet wide along the southwestern boundary of Land Bay C, between fifty (50) and two-hundred and fifty (250) feet wide along the northwestern side of Land Bay D (north of Government Center Parkway).

- A minimum of eighty (80) feet wide west of the Route 29 access road.

- A minimum of thirty-five (35) to fifty (50) feet wide along the southern boundary of Land Bay D parallel to Route 29.

- In Land Bay A a landscaped buffer along Fair Lakes Parkway shall be provided as shown on the CDPA/FDPA.

Paragraphs 14-21 under Environmental PCA 86-W-001-2, RZ 86-P-089, CDPA 86-W-001-2 shall be revised to read as follows:

14. Lighting shall be provided in accordance with Part 9 of Section 14 of the Zoning Ordinance. All parking lot lighting shall not exceed thirty (30) feet in height, including the pole base. Architectural illumination shall be permitted only for sales models during the initial marketing period, until the models are no longer used for sales or 24 months after a Non-RUP has been issued for the initial model, whichever occurs first, which lighting shall be turned off no later than 10:00 p.m. each night. Street lights, parking lot lighting, security lighting, building illumination such as "wall packs," lighting for pedestrian paths and other common areas, shall be fully shielded (i.e full cut-off fixtures will be used) and directed downward.

15. Prior to the issuance of the first non-residential use or residential use permit the Applicant shall restore degraded areas of the EQC to a more natural condition as provided herein. Prior to the approval of a site plan the Applicant shall submit an EQC restoration plan for the review and approval by the Urban Forester. This plan, and the subsequent EQC restoration activities, shall provide for the following:

    - The existing gravel road bed in the EQC in the area identified on the development plan shall be re-graded such that a more natural topographic condition will be provided along both sides of the stream in this area. Such re-grading will occur in a manner that will minimize disturbance to wetlands and mature woodlands on either side of the road bed, as determined by the Urban Forester. The entirety of the road bed in the EQC to the west of the stream shall be included in the area to be re-graded, and an equivalent or greater area shall be included to the east of the stream. The toe of the slope along both sides of the stream in the area of the old road crossing shall be stabilized using biological techniques, subject to Urban Forester approval. The surfaces of the re-graded areas shall be tilled and amended with a layer of organic matter. After this layer has been installed, the re-graded areas shall be replanted with native species of trees and shrubs that are well suited to the soil, topographic, and microclimatic conditions of the areas being planted. Plantings in the restoration area

shall be consistent with Public Facilities Manual guidance regarding buffer area restoration (Section 12-0704.4). In addition, if determined to be appropriate by the Urban Forester, the areas shall be seeded with a mixture containing native grasses, perennials, and woody vegetation in order to establish a native ground cover.

- The existing gravel road bed within the EQC and outside of the aforementioned restoration area shall be restored to a more natural condition where such restoration would be consistent with the development plan, as determined by DPWES. The surfaces of any such areas shall, to the extent determined to be necessary by the Urban Forester, be tilled and amended with a layer of organic matter. After this layer has been installed, these areas shall be replanted with native species of trees and shrubs that are well suited to the soil, topographic, and microclimatic conditions of the areas being planted. Plantings in the restoration area(s) shall be consistent with Public Facilities Manual guidance regarding the buffer area restoration (Section 12-0704.4). In addition, if determined to be appropriate by the Urban Forester, the areas shall be seeded with a mixture containing native grasses, perennials, and woody vegetation in order to establish a native ground cover.

16. A tree preservation plan shall be submitted for the trees proposed to be preserved along Fair Lakes Parkway, east of the main site entrance to the property, and trees located within twenty (20) feet of either side of the limits of clearing and grading elsewhere on the property, including the areas adjacent to the embankment of the SWM facility. The tree preservation plan shall be included as part of the first submission of the site plan. The preservation plan shall be prepared by a professional with experience in the preparation of tree preservation plans, such as a certified arborist or landscape architect, and shall be reviewed and approved by the Urban Forester.

    The tree preservation plan shall consist of a tree survey that includes the location, species, size, crown spread and condition rating of all trees greater than twelve (12) inches in diameter within twenty (20) feet of either side of the limits of clearing as shown on the site plan. The tree survey shall also include areas of clearing and grading not shown on the CDPA/FDPA resulting from engineering requirements, such as off-site clearing and grading for utilities or storm water outfall. The condition analysis shall be prepared using methods outlined in the latest edition of the Guide for Plant Appraisal published by the International Society of Arboriculture. Specific tree preservation activities that maximize the survivability of trees identified to be preserved, such as crown pruning, root pruning, mulching, fertilization, and/or other as necessary, shall be included in the plan for trees that are proposed for preservation along Fair Lakes Parkway, West Ox Road, within the Village Green, and within any other interior courtyard where trees will be preserved.

17. The Applicant shall retain the services of a certified arborist or landscape architect, and shall have the limits of clearing and grading marked with a continuous line of flagging prior to the pre-construction meeting. Before or during the pre-construction meeting, the Applicant's certified arborist or landscape architect shall walk the limits of clearing and grading with an Urban Forester representative to determine where minor adjustments to the clearing limits can be made to increase the survivability of trees at the edge of the limits of clearing and grading, provided, however, that such adjustments shall not result

in a reduction of the planned improvements adjacent to the tree preservation area. Trees labeled for preservation on the CDPA/FDPA which are not likely to survive due to their species and/or proximity to land disturbance will be identified at this time and the Applicant shall remove them and provide replacement trees with the species and location of replacement trees subject to the approval of the Urban Forester. Any tree that is designated for removal at the edge of the limits of clearing and grading or within a tree preservation area shall be removed using a chain saw to avoid damage to surrounding trees. If a stump must be removed, this shall be done using a stump grinding machine in a manner causing as little disturbance as possible to the adjacent trees. Brush, trees up to 4" D.B.H., vines and invasive vegetation within the Village Green and along Fair Lakes Parkway may be removed using handtools only. No driven equipment shall be used in this area. Selected other trees may be removed from the tree save area as identified by the Urban Forester.

18. Tree protection fencing shall be erected at the limits of clearing and grading for areas of tree preservation and shall be shown on the tree preservation plan, phase I & II erosion and sediment control sheets. The tree protection fencing shall consist of six (6) foot high, eleven (11) gauge chain link fence attached to eight (8) foot steel posts, two (2) inches in diameter, driven twenty-four (24) inches into the ground and placed no further than ten (10) feet apart. All tree protection fencing shall be installed prior to any clearing and grading activities. Three days prior to the commencement of any clearing, grading, or demolition activities, the Urban Forester shall be notified and given the opportunity to inspect the site to assure that all tree protection devices have been correctly installed.

19. Development shall strictly conform to the limits of clearing and grading as shown on the approved CDPA/FDPA, allowing for modifications only to provide for utility lines, trails, EQC restoration, and/or the stormwater management facility. For the stormwater management facility, modifications to the limits of clearing and grading may be made only to the extent that such modifications are determined by DPWES to be needed to provide for the stormwater management facility consistent with Stormwater Management proffer 3. Utilities shall be located and designed such that encroachments into the EQC will be avoided where practicable as determined by DPWES and the Urban Forester. To the extent that utilities are located within the EQC, they shall be designed such that land disturbance and impacts to existing trees are minimized subject to review and approval by the Urban Forester. Except as permitted elsewhere herein the EQC shall remain as undisturbed open space with the exception of stormwater management maintenance, the removal of hazardous trees and selective maintenance to remove exotic and/or invasive vegetation. Such activities shall be subject to the Urban Forester's approval. The construction of any retaining walls will be accomplished without any grading, disturbance or clearing within the EQC.

20. With regard to the optional two-level parking garage in Land Bay A, a mix of deciduous trees shall be provided in planters within those portions of the top of the proposed parking garage which are not otherwise designated for parking spaces, travel ways, or pedestrian access. Such landscaping shall consist of five (5%) percent of the surface area of the top level of the retail parking garage. These plantings will be of a type and planted size that are to the reasonable satisfaction of the Urban Forester.

21. Evidence that a Certification of Satisfactory Completion of Remediation based on the proposed development of the property (including residential development) has been issued by the Virginia Department of Environmental Quality shall be provided to DPWES prior to site plan approval for any development on the western portion of Land Bay A. The Applicant shall hire an independent, appropriately qualified consultant, subject to DPWES approval to review and monitor the construction process for all development on the western portion of the site to ensure that the appropriate measures are taken consistent with the DEQ certification and the Risk Assessment that was submitted to DEQ by DPWES. The consultant shall report to DPWES monthly during the construction and once upon completion of construction on the western portion of the site to document that DEQ's requirements have been followed.

Paragraph 4 shall be added under Noise Attenuation PCA 86-W-001-2, RZ 86-P-089, CDPA 86-W-001-2 to read as follows:

4.A. As provided in subsequent paragraphs of this proffer, noise mitigation measures will be provided to ensure:

- That a maximum exterior noise level of DNL 65 dBA will be achieved for any outdoor recreation area associated with the residential units;
- That a maximum interior noise level of approximately DNL 45 dBA will be achieved for any dwelling unit that will be exposed to noise levels in excess of DNL 65 dBA; and
- That a maximum exterior noise level of DNL 75 dBA will be achieved for all facades including the uppermost levels (excluding attics) of all dwelling units.

B. In order to achieve compliance with the above maximum exterior and interior noise levels, a noise barrier will be constructed, using concrete panels, in VDOT right-of-way in the locations shown on Sheet 15 of the CDPA/FDPA prior to issuance of the first RUP for buildings in R-2, subject to DPWES and VDOT approval and subject to the granting of an RPA exception, if required. In the event that either noise wall is not permitted within the I-66 or West Ox Road right-of-way, applicant shall demonstrate failed attempts to the Director of DPZ. If the Director concurs that the applicant has used best efforts to locate such noise wall(s) within the VDOT right-of-way and the right has been denied, then such noise wall(s) shall be located outside of the right-of-way as depicted on Sheet 2 of the CDPA/FDPA. The noise wall(s) will be consistent in height with the recommendations of the noise study prepared by Wyle Laboratories dated November 10, 2003, December 22, 2003 and December 23, 2003, subject to minor modification pursuant to paragraph C of this proffer. The noise wall(s) shall be constructed prior to issuance of RUPs in R-2. The noise wall(s) will be architecturally solid from ground up, with no gaps or openings, other than the minimum needed for drainage, and will be consistent in materials and design with noise attenuation walls constructed by the VDOT along Interstates, subject to final approval by DPWES in coordination with DPZ. If the noise wall is located north of the EQC line along buildings in R-2, it shall not exceed 35 feet in height as measured on the residential side of the wall. In the event that gaps in the noise wall(s) are needed to provide for drainage as determined by DPWES, the gaps shall be minimized subject to the determination of DPWES in coordination with DPZ and an

updated noise study shall be provided that demonstrates that the gaps would not result in noise levels that would be in conflict with those prescribed in paragraph A.

C. The Applicant will submit a revised noise study, for review and approval by DPWES and DPZ prior to the approval of the first site plan for residential development of the R-1 and/or R-2 buildings, that will document attainment of the maximum exterior noise standards set forth in paragraph A of this proffer, based on final site topography and the best available information regarding future road and transit improvements within the right of way of Interstate 66.

In addition, the revised noise study will provide noise impact projections (in terms of DNL dBA) for all levels of building facades that will be affected by noise levels in excess of DNL 65 dBA.

If necessary to achieve either of the exterior noise standards of paragraph A of this proffer, minor modifications to the height and location of the noise barrier may be permitted; however, substantial modifications, as determined by DPWES and DPZ, shall not be permitted without an amendment to these proffers.

D. In order to achieve a maximum interior noise level of approximately DNL 45 dBA, the following building material standards will be met for all facades of dwelling units in the R-1 and R-2 buildings with projected noise exposure impacts between DNL 65 dBA and DNL 70 dBA as identified in the revised noise study submitted pursuant to paragraph C of this proffer:

- Exterior walls will have a laboratory sound transmission class (STC) rating of at least 39
- Doors, windows, and other glazed areas will have a laboratory STC rating of at least 28. If doors, windows, and other glazed areas constitute more than 20% of any exposed façade, such features will have a laboratory STC rating of at least 39.
- Measures to seal and caulk between exterior wall surfaces will follow methods approved by the American Society for Testing and Materials to minimize sound transmission.

Compliance with these building material standards will be demonstrated by the Applicant, to the satisfaction of DPWES, prior to the issuance of building permits for the units in question.

E. In order to achieve a maximum interior noise level of approximately DNL 45 dBA, the following building material standards will be met for all facades of dwelling units in the R-1 and R-2 buildings with projected noise exposure impacts between DNL 70 dBA and DNL 75 dBA as identified in the revised noise study submitted pursuant to paragraph C of this proffer:

- Exterior walls will have a laboratory sound transmission class (STC) rating of at least 45;

- Doors, windows, and other glazed areas will have a laboratory STC rating of at least 37. If doors, windows, and other glazed areas constitute more than 20% of any exposed façade, such features will have a laboratory STC rating of at least 45.
- Measures to seal and caulk between exterior wall surfaces will follow methods approved by the American Society for Testing and Materials to minimize sound transmission.

Compliance with these building material standards will be demonstrated by the Applicant, to the satisfaction of DPWES, prior to the issuance of building permits for the units in question.

F. As an alternative to paragraphs D and/or E of this proffer, the Applicant may pursue other methods of mitigating interior noise impacts if it can be demonstrated, through the noise study and subject to the review and approval of DPWES and DPZ, that these methods will be effective in reducing interior noise levels to a maximum of approximately DNL 45 dBA.

G. A reserve fund study shall be conducted to determine the maintenance and eventual replacement cost of the noise wall if located outside the VDOT right-of-way, and the HOA fees for the units in the R-2 buildings shall reflect the results of the study. The HOA shall be required to obtain and keep in force, an insurance policy for the replacement of the barrier if located outside the VDOT right-of-way.

H. A "noise mitigation" sheet will be provided within any applicable Site Plan submission. This sheet will include the following information:

   a. A graphic illustrating the location, design details, and height of the noise barrier and identifying all building facades for which interior noise mitigation measures will be provided; and
   b. A synopsis of the recommendations of the noise study/ies.

I. Prior to site plan approval for units in building R-1, the Applicant shall demonstrate to the satisfaction of DPWES that the maximum exterior noise level of DNL 75 dBA will be achieved for all facades of building R-1. Prior to issuance of RUPs for units in building R-1, the Applicant shall demonstrate to the satisfaction of DPWES that interior noise levels shall not exceed 45 dBA.

J. Plantings adjacent to the noise wall if built in the alternative location outside of the RPA shall be provided as indicated on the CDPA/FDPA and in coordination with the Urban Forester Division.

   i. In areas between the noise barrier and residential units, plantings shall be provided consistent with the Landscape Plan. Species that are selected for planting shall be well suited to the conditions that will be present in these areas (including shading from the barrier) and shall be subject to approval by the Urban Forester.

ii. In the area between the noise barrier and West Ox Road, subject to approval by the Urban Forester and, where applicable, the Virginia Department of Transportation (VDOT), plantings shall be provided consistent in type and density with those identified on the Landscape Plan for areas between the barrier and dwelling units.

iii. If the barrier is not located in the right-of-way, in the unwooded areas between noise barrier and the right-of-way of I-66 native species of trees shall be planted where such plantings is determined appropriate by the Urban Forestry Division. The density of tree plantings shall be consistent with guidance regarding buffer area restoration in the PFM Section 12-0704.4.

K. The Applicant shall disclose to all initial residential purchasers within the HOA documents that the development will include a noise wall. Maps depicting the location and height of the noise wall and proximity to the individual units will be provided as part of said disclosure at the time of the contract execution for each such initial sale. Notification of the height and location of the noise wall, as well as HOA maintenance responsibility for it, shall also be provided in the HOA documents.

Paragraph 1c under Trails PCA 86-W-001-2, RZ 86-P-089, CDPA 86-W-001-2 shall be revised to read as follows:

1c. An eight (8) foot wide asphalt trail along Land Bay A's Fair Lake Parkway frontage.

Paragraph 2a under Trails PCA 86-W-001-2, RZ 86-P-089, CDPA 86-W-001-2 shall be added to read as follows:

2a. At least one bicycle parking rack shall be provided, respectively, at building R-1, within the R-2 buildings area and within the retail parking lot.

Paragraph 4 shall be added under Trails PCA 86-W-001-2, RZ 86-P-089, CDPA 86-W-001-2 to read as follows:

4. A five (5) foot concrete sidewalk shall be provided along East Market Street from Fair Lakes Parkway to the western edge of Land Bay A. In addition to the sidewalks depicted on the CDPA/FDPA, a sidewalk shall be provided along the western edge of Building S-2 and sidewalks will be provided on the ends of rows of units along Beacon Grove Road.

Paragraph 8 under Transportation PCA 86-W-001-2, RZ 86-P-089, CDPA 86-001-2 shall be revised to read as follows:

8. Prior to the issuance of the first RUP or Non-RUP, the Applicant shall construct the following road improvements:

a. An eastbound right turn/deceleration lane into the western property entrance on Fair Lakes Parkway;

b. An extension of the westbound left turn/deceleration lane into the western property entrance on Fair Lakes Parkway;

c. Dual left turn lanes onto northbound West Ox Road from Fair Lakes Parkway and a modification of the traffic signal as determined by VDOT; in the event that VDOT does not permit the dual left lanes the left turn lane shall be extended to a length determined appropriate by VDOT;

d. The extension of eastbound right turn/deceleration lane onto southbound West Ox Road; and

e. The Applicant shall submit a traffic signal warrant analysis and, if warranted, design and install a traffic signal at the main entrance to the site from Fair Lakes Parkway at any point up to two years following the complete build out of the site as evidenced by the issuance of a tenant Non-RUP for the non-residential buildings and RUPs for residential buildings. If at the end of the two year period after complete build out VDOT has determined that such a signal is not necessary, the Applicant shall be released from this obligation.

Concurrent with the construction of the eastern entrance from Fair Lakes Parkway and prior to issuance of RUPs for the buildings in R-2, the Applicant shall construct a right turn deceleration lane.

Paragraph 10 under Transportation PCA 86-W-001-2, RZ 86-P-089, CDPA 86-W-001-2 shall be revised to read as follows:

10. Prior to issuance of a RUP or Non-RUP, a bus shelter shall be provided on Fair Lakes Parkway in a location to be determined by DOT. The Applicant shall maintain this bus shelter. The maintenance responsibilities for the bus shelter shall be contained in the HOA documents.

Paragraph 11 under Transportation PCA 86-W-001-2, RZ 86-P-089, CDPA 86-W-001-2 will be met for Land Bay A by 8.e. above.

Paragraphs 16-20 under Transportation PCA 86-W-001-2, RZ 86-P-089, CDPA 86-W-001-2 shall be revised to read as follows:

16. Right-of-way identified on the CDPA/FDPA for R.O.W. dedication at I-66 shall be dedicated to the County Board of Supervisors in fee simple upon record plat approval of the adjacent land or upon demand by Fairfax County, whichever occurs first. Prior to, and until the beginning of, construction of the I-66 improvements project requiring said right-of-way; the Applicant may utilize said area for parking subject to a licensing agreement with the County and/or VDOT. The Applicant, its successors or assigns, shall bear the cost of the termination, vacation and removal of temporary parking spaces located in said right-of-way area. The Applicant shall dedicate an additional increment of right-of-way approximately 20 feet in width as shown on Sheet 15 of the CDPA/FDPA, contingent upon VDOT acceptance of the noise attenuation wall being located within said additional increment of right-of-way.

17. Prior to issuance of a Non-RUP for Building S-1, S-2, or S-3, or a RUP for R-1 or R-2, travel ways to Fair Lakes Parkway and Fair Lakes Circle via Roger Stover Drive shall be constructed in conformance with the Public Facilities Manual standards as depicted on

the CDPA/FDPA. In addition, the Applicant shall provide public ingress-egress easements for the internal streets and demonstrate the ability to access Roger Stover Drive to the west. The private streets within R-2 shall be constructed in conformance with the Public Facilities Manual standards as depicted on the CDPA/FDPA.

18. Ancillary, temporary, and permanent construction easements, parallel to the proposed right of way reservation along the southern property line and no more than fifteen (15) feet in width, shall be provided as necessary for the proposed public transportation project on I-66 at no cost to the County. Such easements shall not result in the permanent loss of required parking nor impact the use of or access to any building.

19. Residential Driveways in Land Bay A shall be a minimum of eighteen feet in length.

20. The East Market residential and non-residential associations shall have the option to utilize the Fair Lakes shuttle so long as it is in operation.

The Proffers/Development Conditions associated with PCA 86-W-001-6, PCA 86-P-089-3, FDPA 86-P-001-4, FDP 86-P-089, dated October 4, 1995, and approved by the Board of Supervisors on October 30, 1995, shall be deleted in their entirety.

The Proffers/Development Conditions associated with PCA 86-W-001-7, PCA 86-P-089-4, FDPA 86-W-001-5, FDPA 86-P-089 dated July 11, 1997, and approved by the Board of Supervisors on August 4, 1997, shall be deleted in their entirety.

The Proffers/Development Conditions associated with PCA 86-W-001-9, PCA 86-P-089-5, FDPA 86-W-001-05-02-01, FDPA 86-P-089-02 dated September 18, 2002, and approved by the Board of Supervisors on September 23, 2002, shall be deleted in their entirety.

Successors and Assigns. Each reference to "Applicant" in this proffer statement shall include within its meaning, and shall be binding upon, Applicant's successor(s) in interest and/or the developer(s) of the site or any portion of the site.

Counterparts. To facilitate execution, this Proffer Statement may be executed in as many counterparts as may be required. It shall not be necessary that the signature on behalf of all the parties to this Proffer Statement appear on each counterpart of this Proffer Statement. All counterparts of this Proffer Statement shall collectively constitute a single instrument.

Severability. Any of the sections or individual land bays may be subject to a Proffered Condition Amendment ("PCA") or FDPA without joinder and/or consent of the other sections or land bays, if such PCA or FDPA does not affect any other sections or land bays. Previously approved proffered conditions or development conditions applicable to the section(s) or land bay(s) not the subject of such a PCA or FDPA shall otherwise remain in full force and effect.

[SIGNATURES BEGIN ON THE FOLLOWING PAGE]

TITLE OWNER:
Board of Supervisors of Fairfax County, Virginia

By: _____
Anthony H. Griffin, County Executive

APPLICANT:
The Peterson Companies L.C.

By: _____
Name: James W. Todd
Title: Manager

CONTRACT PURCHASER:
East Market Investments L.L.C.

By: _____
Name: Steven B. Peterson
Title: Manager

ATTACHMENT 1

FAIRFAX COUNTY, VIRGINIA

MEMORANDUM

Michelle Brickner, Director
Office of Site Development Services

DATE: June 17, 2002

M: Carl E. Bouchard, Director
Stormwater Planning Division

ERENCE: Land Bay "A"
Upper BMP/SWM pond design

ave completed the review of the hydraulic analysis for the referenced project by William H. on Associates, Inc (WHGA). The analysis was performed as part of the Agreement between ax County and the developer of Land Bay "A", to design and construct a two-pond system et the BMP/SWM requirements for the entire watershed upstream of Land Bay "A".

conclude that the hydraulic analysis for the two-pond system included in the June 10, 2002 from WHGA satisfies the requirements stated in the Agreement. However, to accomplish results, it is necessary that the County grant waivers/permits for the following conditions:

- 10-year release rate of the post-development condition to be greater than that of the pre-development by 3.16%, namely 42 cfs.
- The Spillway Design Flood and Free Board Hydrograph (SDF/FBH) to be routed through the 100-year and 1.5x100-year storm, respectively.
- Allow the use of a combined principal and emergency spillway.

above actions require approvals from OSDS, DPZ, Planning Commission and the Board of rvisors. We recommend that the waivers be granted.

osed is the June 10, 2002 letter from WHGA, showing the data used in the analysis. If you any questions or require additional information, please call Ken Lim or me at 324-5500.

b/land-a-m2.doc

hments: As Stated

Hossein Malayeri, Building Design Branch, Planning and Design Division
John Friedman, Office of Site Development Services
Harbans Matharoo, Chief, Storm Drainage Projects Branch, SWPD

am H. Gordon Associates, Inc.

The Gordon Building
4501 Daly Drive
Chantilly, Virginia 20151
703-263-1900
(fax) 703-263-0766

10th, 2002

arl Bouchard, P.E.
lor, Stormwater Planning Division
x County DPW&ES :
) Government Center Parkway
449
ax, VA 22035

ect: Fairfax County Landbay A – Stormwater Management (SWM) and BMP Facility
WHGA # 734-0310

Response to your letter dated May 30th, 2002 regarding proposed SWM release rates and BMP volumes

r Mr. Bouchard:

am H. Gordon Associates, Inc. has reviewed your letter referenced above and we have re-yzed the stormwater management (SWM) release rates and BMP volumes as you have ested. For this new analysis, and as you have suggested, we assumed that the SWM ase rates could exceed the minimum allowable and that we could excavate (slightly) within EOC. The excavation in the EOC area is limited to the removal of the old dirt roadbed only. itionally, we propose a weir length that is slightly greater than the weir previously proposed the approved drainage study. All in an effort to maximize the BMP volume.

izing these new design parameters, two additional scenarios were analyzed for the upper d. Each scenario assumes the same top of dam elevation of 410 and establishes the dmum 100 year WSE at elevation 408. Through a trail and error process, we concluded that itional BMP volume of approximately 2.0 acre-feet could be provided in the upper pond by ablishing the BMP elevation at 401 (scenario #1). This provides a 2 foot freeboard uirement for the 100 year storm event, however, the 10 year release rate (1372 cfs) exceeds minimum (1330 cfs) by approximately 42 cfs. We also ran the calculations by establishing BMP at elevation 402 (scenario #2). This provides approximately 3.5 acre-feet of BMP age, however, the 10 year release rate is also exceeded and the freeboard from the top of n to the 100 year WSE is less than two feet. Given these two scenarios, WHGA recommends the BMP elevation be set at elevation 401, thereby we can provide two feet of freeboard for 100 year storm but we have a slight increase in the 10 year release rate. This scenario will vide approximately 2.0 acre feet of storage.

ddition to the recommended increase of BMP in the upper pond, WHGA re-calculated the P volume that is provided in the lower pond. After accounting for the volume loss associated the upper pond embankment and a re-measurement of the remaining area we have found the lower pond will provide approximately 12.5 acre –feet of BMP storage.

refore, the combined volumes of the recommended scenario for the upper pond and the values for the lower pond provide approximately 14.5 acre-feet of BMP storage. This would be possible without the excavation in the EOC and the increase in the 10 year release rate.

E. Bouchard, P.E.
: 7th, 2002
e 2

o wanted to point out that there are several elements of the proposed SWM/BMP facility will require modifications to the Public Facilities Manual (PFM). First, we need your nission to permit the SWM release rate for the 10 year storm to be greater than the vable. Second, we request permission to have a combined principal and emergency way. Finally, the upper pond is being designed using the 100-year and the 1.5 x 100 year m for the SDF/FBH which is less than the current PFM criteria. This final modification is llar to the permitted design of the lower pond and was a design parameter mentioned as far k as the 1995 Dewberry and Davis report attached with your letter.

closed are our calculations supporting our conclusions. We ask for your approval of our ommendations and the acceptance of our PFM modifications. We would appreciate the ortunity to meet with you to discuss this information at your earliest convenience. Please call ou have any questions.

cerely,

LLIAM H. GORDON ASSOCIATES, INC.

bert W. Walker, C.L.A.
e President

Hossein Malayeri, FFx Cty
Cary Euwer, Metropolitan Partnership
Wayne Barber, Metropolitan Partnership
Carlos Montenegro, Metropolitan Partnership
Ken Lim, FFx Cty
John Freidman, FFx Cty
Han Chey, WHGA
Joe McClellan, WHGA

BMP EL=402 FT

NO.	ITEM	LOWER POND		UPPER POND		TOTAL BMP	REMARKS
1	BMP EL	397.88	FT	401.00	FT		
2	BMP VOLUME	12.5	AF	3.50	AF	16.0 AF	
3	TOP OF DAM	404.55	FT	410.00	FT		
4	100-YEAR W.S.E	402.13	FT	408.23	FT		LESS THAN 2' F.B. - 1.77'
5	1.5 X 100 YR W.S.E	403.59	FT	409.74	FT		
6	10-YEAR W.S.E.	401.02	FT	407.23	FT		
7	2-YEAR PEAK FLOW	592.00	CFS	-			
8	10-YEAR PEAK FLOW	1335.00	CFS	-			

10% allowance 1330
BMP EL=401 FT

NO.	ITEM	LOWER POND		UPPER POND		TOTAL BMP	REMARKS
1	BMP EL	397.88	FT	401.00	FT		
2	BMP VOLUME	12.5	AF	2.00	AF	14.5 AF	
3	TOP OF DAM	404.55	FT	410.00	FT		
4	100-YEAR W.S.E	402.11	FT	407.85	FT		2.15' F.B.
5	1.5 X 100 YR W.S.E	403.60	FT	409.35	FT		
6	10-YEAR W.S.E.	401.05	FT	406.41	FT		
7	2-YEAR PEAK FLOW	636.00	CFS	-			
8	10-YEAR PEAK FLOW	1372.00	CFS	-			

NOTE: LOWER POND VOLUME IS AFTER UPPER POND BUILT.

PROPOSED FINAL DEVELOPMENT PLAN AMENDMENT CONDITIONS

FDPA 86-W-001-05-02-02/FDPA 86-P-089-03

January 22, 2004

If it is the intent of the Board of Supervisors to approve FDPA 86-W-001-05-02-02, FDPA 86-P-089-03, FDPA 82-P-069-14-03 for a mixed use development located at Tax Map 55-2 ((1)) 15, staff recommends that the Board of Supervisors condition the approval by requiring conformance with the following development conditions, which supercede all the previously approved conditions:

1. Development of the subject property shall be in substantial conformance with the Final Development Plan Amendment entitled "East Market at Fair Lakes (Land Bay A of the Government Center)" consisting of eighteen (18) sheets and submitted by William H. Gordon Associates, Inc. dated June 2003 as revised through December 31, 2003.

2. Regardless of the elevations depicted on the CDPA/FDPA, the façade of the western four-story multi-family building (R-1) along East Market Drive shall consist of a combination of brick, pre-cast, stucco and/or EIFS and not siding. The first level of the building shall be entirely brick or pre-cast except for windows and doors.

3. Regardless of the landscape plan, there shall be an ornamental tree planted between every combined driveway for the eastern stacked units (R-2) as determined by the Urban Forester.

4. The applicant shall disclose within the HOA documents that the noise barrier has not been designed to mitigate exterior noise impacts to balconies/decks on upper levels of dwelling units and shall be subject to high noise levels from I-66.

5. The noise wall(s) will be consistent in height with the recommendations of the noise study prepared by Wyle Laboratories dated November 10, 2003, December 22, 2003 and December 23, 2003 contained in Attachment 1, subject to minor modification pursuant to the proffers.

6. During development, super silt fencing shall be installed along all areas adjacent to floodplain and/or RPAs, subject to Urban Forestry Division approval.

7. No more land shall be disturbed for the construction of the noise wall than determined necessary by DPWES. Indigenous vegetation shall be preserved to the maximum extent possible within the RPA for the construction of the noise wall. Any area disturbed for wall construction shall be restored, subject to Urban Forestry Division approval.

8. The limits of clearing and grading shown on the CDPA/FDPA shall be strictly observed and enforced.

9. No more than four buildings (eight units) in R-2 shall incorporate temporary architectural lighting.

10. All signage depicted in the CDPA/FDPA is illustrative only; all signage shall be subject to review and approval of a Comprehensive Sign Plan Amendment.

ATTACHMENT 1

wyle laboratories

November 10, 2003

J/N 48703

Mr. Jeff Saxe
The Peterson Companies
12500 Fair Lakes Circle
Fairfax, Virginia 22033

Reference: Revised East Market at Fair Lakes Outdoor Noise Analysis

Dear Mr. Saxe:

This letter describes the revised outdoor noise level analysis for the East Market at Fair Lakes residential project located along I-66, West Ox Road, and Fair Lakes Parkway in Fairfax County, Virginia. This letter supersedes our report dated September 3, 2003. The major changes are to accommodate the new plans noted below and to correct a mathematical mistake in the traffic volume calculations.

Our analysis was based on the preliminary site plan with grading provided by William H. Gordon Associates Inc. on October 29, 2003. This plan shows the proposed townhouses, townhouse floor elevations, finished grade elevations, and the proposed noise wall location. The noise wall location is slightly different than on earlier plans. Also, the two rows of townhouses along I-66 have been shifted slightly farther from adjacent buildings. The locations of the proposed commercial and condominium buildings and parking garage were obtained from the PCA/CDPA/FDPA East Market at Fair Lakes revised 10/21/03. The elevations of the proposed commercial and condominium buildings and parking garage were obtained from the Preliminary Grading Plan dated October 16, 2003. The location and elevation of Fairfield Center Two (that is located off-site east of West Ox Road) were obtained from the Landscape Plan dated November 1999.

Attached as Appendix C is the completed Noise Study Summary Information form required by Zoning Ordinance Amendment ZO 00-330.

Executive Summary

During two site surveys in June and July 2003 noise levels were measured and traffic counts were performed. A computerized Traffic Noise Model (TNM) of the site was developed. The measured sound levels were compared with those output from the computer model (with the traffic counts as the input). The resulting sound levels were quite similar.

The noise model was then used to predict future noise levels on the site with traffic forecasts obtained from Fairfax County as the input.

Wyle Laboratories, Inc. 2001 Jefferson Davis Highway, Suite 701, Arlington, VA 22202-3604 Tel: 703/415-4550, Telecopy: 703/415-4558

The unmitigated future DNL at the fourth floor will clearly exceed the Fairfax County goal of 75 dB at the buildings as shown in Figure 2. With the noise barrier shown in Figure 3 the Fairfax County outdoor noise goals of 75 dB at the top floor windows and 65 dB in outdoor activity areas will be met. Even if the condominium buildings were built prior to the commercial buildings, the DNL would not exceed 75 dB.

1.0 Existing Noise Levels

1.1 Measured Noise Levels

In order to validate the results of the noise model (see section entitled TNM calibration below) noise levels were measured at three locations on the site continuously from 6:00 p.m. on Monday June 9, 2003, until 9:00 a.m. on Friday June 13, 2003. However, when we tried to compare the results with the TNM model, the results were far off for the location along I-66. Therefore, we performed additional measurements continuously from 12:00 p.m. on Tuesday July 15, 2003, until 2:00 p.m. on Friday July 18, 2003 at three locations along I-66.

The sound level meters were Larson Davis Laboratories type 820 and 824 integrating sound level meters programmed to report average, maximum, and minimum sound levels during five-minute intervals. For the first survey the sound level meters were placed at the locations designated M1 and M2 in Figure 1. The microphone for M1 was 5'-0" high, and the microphone for M2 was 6'-10" high. The data for the location along I-66 for the first survey are not presented in this report. For the second survey, the three sound level meters were placed at the location designated M3 in Figure 1, at three different elevations: 5-8", 27', and 37' high. The microphones of the sound level meters were raised into position with a piece of string thrown over a tall tree. Unfortunately, the 27'- and 37'-high microphones slid down the string during the measurement period, settling 18'-6" high. By evaluating the measured sound levels we determined that the microphones were at the original elevations at least during the first hour of the survey. Therefore, data are presented for the entire measurement period for the 5'-8" height, but only for the first hour for the 27' and 37' heights.

Average sound levels during each one-hour interval were calculated from the measurement data. The Day-Night Average Sound Levels (DNL or Ldn) were also calculated. DNL is the noise metric used by Fairfax County to assess the compatibility of proposed land uses along highways. The DNL is a weighted average noise level calculated based on the average noise level over a 24-hour calendar day, with a 10-decibel (dB) penalty added to noise from 12 a.m. to 7 a.m. and from 10 p.m. to midnight. Typically, this term is written "DNL" in narrative form, and Ldn in equation form. Tables 1, 2, 3, and 4 present the measured sound levels.

Table 1. Measured DNL, dB

Day, Date, and Time	M1 (Fair Lakes)	M2 (West Ox)	M3 (I-66) 5'-8" High
M 6/9 6pm – T 6/10 6pm	65.7	70.0	
T 6/10	65.4	70.2	
W 6/11	65.9	69.9	
Th 6/12	65.4	69.4	
Th 6/12 9am – F 6/13 9am	66.1	69.7	
T 7/15 12 pm – W 7/16 12 pm			75.3
W 7/16			75.3
Th 7/17			75.2
Th 7/17 12 pm – F 7/18 12 pm			76.0

Table 2. Measured Loudest-Hour Average Sound Level, dB

Day, Date, and Time	M1 (Fair Lakes)	M2 (West Ox)	M3 (I-66) 5'-8" High
M 6/9 6pm – T 6/10 6pm	62.3	68.1	
T 6/10	62.3	68.1	
W 6/11	64.0	67.6	
Th 6/12	66.3	67.4	
Th 6/12 9am – F 6/13 9am	66.3	67.4	
T 7/15 12 pm – W 7/16 12 pm			72.6
W 7/16			72.0
Th 7/17			71.8
Th 7/17 12 pm – F 7/18 12 pm			72.7

1.2 Discussion of Measured Noise Levels

We obtained hourly weather data from the National Weather Service for Washington-Dulles International Airport during both site surveys. Periods of rain were reported between 7 and 10 p.m. on Wednesday, and for most of Thursday during the first survey; the measurement data for these days was significantly affected by rain at times. During the second survey, there was no rain and winds were light; these conditions are conducive for repeatable sound level measurements.

Table 3. DNL Minus Loudest-Hour Average Sound Level, dB

Day, Date, and Time	M1 (Fair Lakes)	M2 (West Ox)	M3 (I-66) 5'-8" High
M 6/9 6pm – T 6/10 6pm	3.4	1.9	
T 6/10	3.2	2.1	
W 6/11	1.9	2.3	
Th 6/12	-0.9	2.0	
Th 6/12 9am – F 6/13 9am	-0.2	2.3	
T 7/15 12 pm – W 7/16 12 pm			2.6
W 7/16			3.3
Th 7/17			3.4
Th 7/17 12 pm – F 7/18 12 pm			3.3

Table 4. Measured Hourly Avg. Sound Levels at M4 (12 - 1 pm July 15, 2003), dB

5'-7" High	27' High	37' High
72.0	74.6	75.5

The predominant source of noise on the site was highway traffic.

It can be seen from Table 3 that the DNL during the first survey for Tuesday (and for 6 p.m. Monday through 6 p.m. Tuesday) at M1 and M2 was between 1.9 and 3.4 dB higher than the loudest-hour average sound level. Note that our July 20, 2003 report included a mathematical mistake in the calculation of the DNL for location M1 for June 9 and 10. The data for the other time periods during the first survey were affected by rain. It can also be seen from Table 3 that the DNL was between 2.6 and 3.4 dB higher than the loudest-hour average sound level at location M3 during the second survey. Based on this data, we assumed that the DNL in the future would be approximately 3 dB higher than the loudest-hour average sound level.

For the second survey hourly average sound levels at M3 5'-8" high reached a low between 2 and 4 a.m., and varied within a very narrow (1.7 to 1.9 dB) range between 5 a.m. and 10 p.m. For the first survey, there was a very similar pattern.

It can be seen from Table 4 that sound levels were 2.6 dB higher at the 27-foot height than at the 5'-8" height, and 3.5 dB higher at the 37-foot height than at the 5'-8" height. Based on these relationships we estimated the DNL that would have been measured at the 27-foot and 37-foot heights. These values are presented in Table 5.

Table 5. Estimated DNL 27 and 37 Feet High, dB

Day, Date, and Time	27'	37'
T 7/15 12 pm – W 7/16 12 pm	77.9	78.8
W 7/16	77.9	78.8
Th 7/17	77.8	78.7
R 7/17 12 pm – F 7/18 12 pm	78.6	79.5

2.0 Existing Traffic Conditions

2.1 Traffic Counts

In order to compare the output of the noise model with the measured sound levels traffic volumes were counted during both site surveys. Traffic volumes were counted during one five-minute interval for each direction of traffic on I-66, West Ox Road, and Fair Lakes Parkway between 6:05 and 6:40 p.m. on Monday June 9, 2003. Traffic volumes were also counted during two five-minute intervals for each direction of traffic on I-66, and during one five-minute interval for each direction on West Ox Road and Fair Lakes Parkway between 12:44 and 1:05 p.m. on Tuesday July 15, 2003.

We determined the approximate hourly traffic volumes based on these counts. The approximate hourly volumes for automobiles, medium trucks (MT, cargo vehicles with six wheels and two axles), heavy trucks (HT, cargo vehicles with three or more axles), buses, and motorcycles (M/C) are presented in Table 6 and 7.

2.2 Traffic Classification and Directional Distribution

Since the traffic counts from the first survey were performed during rush hour and the counts from the second survey were not, we used the first survey counts to determine the percentage of trucks and directional distribution for the future analysis. It can be seen from Table 6 that 63.6% of the total traffic volume was on the near lanes of I-66 during the traffic counts, 54.3% was on the near lanes of Fair Lakes Parkway, and 63.6% was on the near lanes of West Ox Road.

2.3 Traffic Speed

The posted speed limits are 55 mph on I-66 and 45 mph on Fair Lakes Parkway. We estimated the prevailing speed by driving by the site with the flow of traffic during the traffic counts. The prevailing speeds were 68 mph on the westbound lanes of I-66, between 58 and 68 mph on the eastbound lanes of I-66 (traffic slows from 68 mph at the western side of the site to 58 mph at the West Ox Road overpass), approximately 0-25 mph on West Ox Road, and approximately 0-45 mph

on Fair Lakes Parkway (traffic slows considerably at the lights on West Ox Road and Fair Lakes Parkway). For our analysis we assumed that the long-term average speeds were:

- 45 mph on Fair Lakes Parkway eastbound before Fair Lakes Circle, accelerating from 30 to 45 mph from Fair Lakes Circle to the middle of the site, decelerating from 45 to 20 mph at West Ox Road, and accelerating from 20 to 25 mph from West Ox Road eastward
- 20 mph on Fair Lakes Parkway westbound before West Ox Road, accelerating to 45 mph at the site and to points to the west
- 20 mph on West Ox Road southbound before Fair Lakes Parkway, and 25 mph afterward
- 25 mph on West Ox Road northbound before Fair Lakes Parkway, and 20 mph afterward

Table 6. Approximate Existing Hourly Traffic Volumes 6:05-6:40 pm June 9, 2003

Lanes	Autos	MT	HT	Buses	M/C
I-66W (Near)	6,012	48	60	36	12
I-66E (Far)	3,408	24	60	36	0
Fair Lakes E (Near)	948	12	12	12	0
Fair Lakes W (Far)	816	12	0	0	0
West Ox S (Near)	1,380	24	12	12	0
West Ox N (Far)	792	12	12	0	0

Table 7. Approximate Existing Hourly Traffic Volumes 12:44-1:05 pm July 15, 2003

Lanes	Autos	MT	HT	Buses	M/C
I-66W (Near)	3,840	126	234	0	6
I-66E (Far)	3,390	132	150	6	12
Fair Lakes E (Near)	1,008	0	12	0	0
Fair Lakes W (Far)	1,200	0	0	0	0
West Ox S (Near)	1,020	36	0	0	0
West Ox N (Far)	1,368	12	48	0	0

3.0 TNM Calibration

The Traffic Noise Model (TNM) is a computer program developed by the Federal Highway Administration (FHWA) and used to predict noise levels near highways. This model is approved for use by Fairfax County in Zoning Ordinance Amendment ZO 00-330. Input parameters include three-dimensional coordinates of the

roadways, receiver points, and noise barriers (including existing and proposed barriers such as retaining walls, noise walls, and buildings); the hourly number and speed of automobiles, medium trucks, heavy trucks, buses, and motorcycles; pavement type and road width; ground type; ground elevation in selected locations; and the location of traffic flow control devices. The output from TNM is the hourly average sound level.

I-66, Fair Lakes Parkway, and West Ox Road were included in the TNM model with all elements significant for noise propagation. The ground on the site was modeled as "field grass". The pavement of Fair Lakes Parkway and West Ox Road were modeled as Dense-Grade Asphaltic Concrete (DGAC), while the pavement of the I-66 through lanes was modeled as Portland Cement Concrete (PCC); however, the pavement of West Ox Road on the overpass was modeled as PCC. The I-66 HOV lanes were modeled as DGAC. The ramp from the HOV lanes was modeled as DGAC except where it is on the bridge over the westbound lanes where it was modeled as PCC. We obtained existing elevations of roads and the ground at the sound level meters from the Existing Conditions plan. For the calibration run a tree zone with a height of 40 feet was included in the noise model to simulate the effect of the existing trees on the site. The concrete barriers on the sides of the West Ox Road overpass were included in the analysis as three-foot tall barriers.

TNM was run using the traffic volumes presented in Tables 6 and 7. In order to validate the TNM case, the noise levels measured during the traffic counts were compared with the TNM output. Table 8 presents the results.

Table 8. Comparison of TNM Output and Measured Sound Levels, dB

	M1*	M2*	M3		
			5'-7"	27'	37'
TNM Output	61.4	66.9	72.3	74.9	75.9
Measured Sound Level During Traffic Counts	61.9	66.9	71.6	74.4	75.4
TNM Minus Measured	- 0.5	0.0	+ 0.7	+ 0.5	+ 0.5

* For locations M1 and M2 the average sound level is for 6:05 to 6:20 and 6:25 to 6:40 p.m. The sound level between 6:20 and 6:25 was elevated; we assumed that this was due to a non-traffic event such as an aircraft overflight or an ambulance siren.

It can be seen from Table 8 that the output from TNM at all measurement locations was between 0.5 dB below and 0.7 dB above the measured sound levels. With this

excellent agreement TNM can confidently be used to predict noise levels elsewhere on the site and with different traffic conditions.

4.0 Fairfax County Policy Plan Requirements

The Fairfax County Policy Plan states "New development should not expose people in their homes, or other noise sensitive environments to noise in excess of 45 dBA Ldn, or to noise in excess of 65 dBA Ldn in the outdoor recreation areas of homes." These are the two primary highway noise limits in the Policy Plan. The Plan continues: "New residential development should not occur in areas with projected highway noise exposures exceeding 75 dBA Ldn." This third limit of 75 dB is typically evaluated at the top of windows on each level of the buildings.

5.0 Future Traffic Conditions

5.1 I-66 Configuration, Hourly Volumes, and Speeds

We obtained Commonwealth of Virginia Department of Transportation (DOT) traffic volume data from Noel Kaplan of Fairfax County. For the year 2002 the Annual Average Daily Traffic (AADT) volume of I-66 was 126,000 (based on escalated factored short-term counts). We estimated the traffic volume in the year 2025 by increasing this volume by 3% per year. The resulting AADT forecast is 241,429. The DOT traffic data listed a peak-hour factor of 8% (based on the worst hour of a 48-hour count). The resulting forecast peak-hour volume is 19,314. The DOT data listed a directional factor during the peak hour of 0.87. The resulting peak-hour directional division is 16,803 vehicles westbound and 2,511 vehicles eastbound.

The Comprehensive Plan for Fairfax County calls for widening I-66 to accommodate a total of ten lanes including two HOV lanes and Metro or commuter rail service. Noel Kaplan of Fairfax County provided us with various proposed road sections from the 1998 I-66 Major Investment Study. According to Chuck Olmquist of Fairfax County the most likely option to be selected is Strategy Number 1 which includes Metro in the current median, two reversible HOV lanes and a concrete median barrier where the current westbound lanes are located, four westbound lanes with shoulders within the current right-of-way on the site, and four eastbound lanes with shoulders roughly where they are currently located. We used this road configuration in our analysis. There will likely be a flyover ramp from the HOV lanes to Route 7100; however, this ramp has not been designed. Based on our conversation with Chuck Olmquist we developed reasonable assumptions for this ramp. Due to the constraint of passing under West Ox Road, and climbing in time to cross over the westbound lanes, the general location of the ramp is generally fixed.

The Strategy 1 drawing is schematic for the entire stretch of I-66. The right-of-way width is 20' narrower than shown on the site plan. We assumed that the centerline of the future and existing roadways would be in the same location. The net effect of the new road layout is to shift the westbound lanes significantly closer to the site, to shift the eastbound lanes approximately 20' farther from the site, and to locate the HOV lanes where the westbound lanes currently are. However, to accommodate the new HOV exit ramp, we assumed that the HOV lanes would shift 10' farther from the site just where the ramp was. We also assumed that the pavement of the existing westbound lanes would be re-used by the HOV lanes, thereby, preserving the elevations of the existing roadway. A portion of the pavement of the existing eastbound lanes would likely be re-used by the new eastbound lanes. The plan layout of I-66 used in the TNM analysis, including this ramp, is shown in the attached plan drawing as Appendix B.

The maximum noise levels were measured in the afternoon. We assumed that automobiles, medium trucks, heavy trucks, buses, and motorcycles would account for approximately the same percentage of traffic as observed during the afternoon traffic counts of the first survey (see Table 6, above). Specifically, for I-66 we assumed that medium trucks would account for 1% of traffic, heavy trucks would account for 2%, and buses would account for 1%. For the HOV lanes we assumed that buses would account for 1% of traffic. Due to their infrequent passage motorcycles were neglected. Note that the VDOT data included higher percentages of trucks for the peak hour. Typically, the percentage of trucks is highest in the morning. Since the measured noise levels were highest in the afternoon we did not use the VDOT percentages. The measured noise levels were likely highest in the afternoon, since the nearer westbound lanes of I-66 have more traffic in the afternoon.

The maximum noise level due to a highway is generated while traffic is moving freely with moderate density, as opposed to at the ultimate capacity of the highway. The descriptor of traffic density is the Level Of Service (LOS). For a given roadway, a given Level Of Service corresponds to a fixed range of traffic volumes and speeds. At higher traffic densities traffic slows considerably and noise levels drop.

The first step in determining the traffic volumes and speed for a given LOS is to estimate the Free-Flow Speed (FFS), the speed that passenger cars would travel on this stretch of freeway with low traffic densities. The Highway Capacity Manual 2000 includes a methodology to estimate FFS based on the Base Free-Flow Speed (BFFS), and adjustments for lane width, right-shoulder lateral clearance, number of lanes per direction, and interchange density for the given 6-mile stretch. The BFFS is 70 mph in urban areas such as this, the adjustment for lane width is 0 mph for 12-foot wide lanes, the right-shoulder lateral clearance adjustment is 0 mph for shoulders greater than six feet wide, the adjustment for four lanes per direction is

1.5 mph, the adjustment for an interchange density 0.67 interchanges per mile is 0.9 mph, and the resulting FFS is 67.6 mph for the through lanes. This matches our site observations very well on the westbound lanes; we estimated that the existing speed on the westbound lanes with low traffic densities is 68 mph. However, on the eastbound lanes traffic slows as it approaches the West Ox Road overpass. We estimated that traffic slowed from approximately 68 mph to approximately 58 mph as it approached West Ox Road. On the proposed HOV lanes the only difference is that the adjustment for two lanes per direction is 4.5 mph and the resulting FFS is 64.6 mph.

For reference, copies of pages 23-4 and 23-5 from the Highway Capacity Manual 2000 are attached to this report as Appendix A. These pages show the equation for FFS, a summary table of speeds and volumes for each LOS, and a graph of the relationships between speeds, volumes, and LOS. From the graph you can see how for a low FFS the traffic speed remains steady up to LOS D, while for a higher FFS the traffic speeds start to drop before LOS C.

We performed an analysis to determine at what traffic density noise levels will be highest. We essentially used the future TNM case with four of the most-impacted upper floor receivers. West Ox Road and Fair Lakes Parkway were not included in the analysis to shorten the run times. We used the exact same traffic volumes on all through lanes of I-66 to limit the number of parameters in the analysis. We considered LOS C, D, and two densities in between. The vehicle classifications were those listed above for the through lanes. The highest noise level was generated between LOS C and D conditions when the flow was 1,827 vehicles per hour per lane at a speed of 64.8 mph. Note that the noise level varied within a tight range for of 0.3 to 0.4 dB for all of the evaluated densities including LOS C and D. We used this traffic speed of 64.8 mph in our analysis for the westbound lanes. Since the volumes are lower on the eastbound lanes, the traffic will travel at the FFS of 67.6 mph; however, as noted above, traffic tends to slow eastbound as it approaches West Ox Road. On the eastbound lanes we used a speed of 67.6 mph decelerating to 58 mph as it approaches West Ox Road. For the HOV lanes we performed a similar analysis and the highest noise level was generated at a flow of approximately 1,841 vehicles per hour per lane at a speed of 63.1 mph (the resulting noise level was actually identical within the range of volumes of 1,780 to 1,940). We assumed that this volume would be on the HOV lanes after the exit ramp. We arbitrarily assumed that 10% of the HOV traffic would use the ramp to exit, and that the speed would be 60 mph. The resulting volumes on the HOV lanes before the ramp would be 110% of the loudest volume. The speed with that volume (4,049) would be 60.6 mph.

We noted that the forecast for the eastbound lanes is below our current traffic counts. As a result, we conservatively used a lower peak-hour factor of 0.77; the resulting peak-hour volumes are 14,872 westbound and 4,442 eastbound.

Reducing the peak-hour factor is conservative, since we are using the LOS C/D traffic volumes on the HOV and westbound lanes; all that matters for the forecast is the volume on the eastbound lanes. The result traffic volumes used in our analysis for I-66 are presented in Table 9.

5.2 *West Ox Road and Fair Lakes Parkway Hourly Volumes and Speeds*

We obtained Average Daily Traffic (ADT) volume forecasts from Fairfax County of 40,000 for West Ox Road, and 49,100 for Fair Lakes Parkway. Based on the Virginia Department of Transportation (VDOT) 2002 Daily Traffic Volume data provided by Noel Kaplan of Fairfax County, we assumed that the peak-hour traffic volume would be 8.2% of the future ADT volume on West Ox Road and 8.8% on Fair Lakes Parkway, and that 67.5% of traffic would be on the near (southbound) lanes of West Ox Road and 50.4% would be on the near (eastbound) lanes on Fair Lakes Parkway. Note that for I-66 we assumed that the peak afternoon direction was Westbound. For Fair Lakes Parkway we assumed that the peak afternoon direction was eastbound and for West Ox Road southbound.

We assumed that automobiles, medium trucks, heavy trucks, buses, and motorcycles would account for approximately the same percentage of traffic as observed during the afternoon traffic counts of the first survey (see Table 6, above). Specifically, we assumed that medium trucks would account for 2% of traffic on Fair Lakes Parkway and West Ox Road, heavy trucks would account for 1%, and buses would account for 1%. Due to their infrequent passage motorcycles were neglected.

We assumed that traffic speeds would be:

- 30 mph on Fair Lakes Parkway eastbound before the new traffic signal at the site, and 25 mph thereafter to the east
- 20 mph on Fair Lakes Parkway westbound before West Ox Road, 25 mph until the new traffic signal at the site, and 30 mph thereafter to the west
- 20 mph on West Ox Road

We also considered the effect of traffic signals on West Ox Road and Fair Lakes Parkway. We included signals on Fair Lakes Parkway at the intersection of Fair Lakes Circle, the new road on the site, and West Ox Road. We also included a signal on West Ox Road at Fair Lakes Parkway. The signals cause TNM to consider a specified percentage of the traffic to come to a complete stop at the light and accelerate to full speed. We used 50% for all intersections, except on Fair Lakes Parkway where it hits the new local road we used 20%. However, TNM only considers the effect of acceleration away from the signal, and not the effect of deceleration coming up to the signal. For this reason, it is still appropriate to use reduced speeds to account for congestion at the signals.

5.3 Resulting Traffic Volume Projections

The resulting projected future traffic volumes are presented in Table 9. Note that these volumes are slightly different than in our earlier report; the number of automobiles was corrected for the eastbound and westbound lanes of I-66.

Table 9. Projected Future Hourly Traffic Volumes

Lanes	Autos	MT	HT	Buses	M/C
I-66W (Near)	7,153	75	149	75	0
I-66E (Far)	4,265	44	89	44	0
I-66 HOV Before Exit	4,009	0	0	40	0
I-66 HOV After Exit	3,645	0	0	37	0
Fair Lakes E (Near)	2,091	44	22	22	0
Fair Lakes W (Far)	2,057	43	21	21	0
West Ox S (Near)	2,125	44	22	22	0
West Ox N (Far)	1,023	21	11	11	0

6.0 Unmitigated Future Outdoor Noise Levels

6.1 Highway Noise

TNM was run using the traffic volumes in Table 9 and speeds noted above, with receivers located at the top of the windows on each floor of the proposed townhouses and condominiums, in the central townhouse courtyard, the tot lot, and the ½ basketball court. We assumed that the first, second, third, and fourth floor receivers were 7, 17, 27, and 37 feet, respectively, above the finished floor elevation shown on the drawings, and the tot lot, courtyard, and basketball court receivers were 5 feet above the proposed ground elevation.

I-66 was re-configured, as noted above. The eastbound and westbound lanes were each modeled as two 24'-wide pairs of roads. The HOV lanes were modeled as a 42'-wide road. The ramp from the HOV lanes was modeled as a 21'-wide road. Fair Lakes Parkway and West Ox Road geometry and pavement type were the same as for the calibration run. The ground type was also the same as the calibration run. A pavement ground zone was added on the site to account for the proposed local road between the proposed homes and I-66. A 12'-wide pavement ground zone was added beside the eastbound lanes to account for reflections from the shoulder. The West Ox Road overpass concrete barriers were extended to allow for widening I-66. Three-foot high concrete median barriers were added between the eastbound lanes of I-66 and Metro, and between the HOV lanes and the westbound lanes. The existing tree zone was shrunk to account for the removal of most of the existing

trees as the site is developed, and for the widening of I-66. Shielding provided by the proposed buildings was considered in the analysis. Shielding provided by the existing Fairfield Center Two building across West Ox Road was also included, as was the terrain in the parking lot; these were not included for earlier versions of this analysis. We assumed that the townhouses would be 44 feet tall. As noted above, we assumed that the future DNL would be 3 dB greater than the loudest-hour average noise level.

Figure 2a presents the unmitigated future DNL at the fourth floor of the proposed townhouses, rounded to the nearest 0.5 dB; this includes shielding by the proposed buildings but not from the proposed noise barrier. From Figure 2a it can be seen that the future DNL on the top floors of the townhouses will exceed the Fairfax County guideline of 75 dB. Therefore, a noise barrier is required to shield the townhouses. Figure 2b presents the "unmitigated" future DNL at the fourth floor of the proposed condominiums, with the proposed townhouse buildings but without the proposed commercial buildings, parking garage or noise wall. It can be seen from Figure 2b that the future DNL will not exceed 75 dB (per the proffered condition requirement). [Figures 4e through 4h present the "mitigated" future DNL for the condominiums; this includes both the proposed noise wall and commercial buildings. However, the noise levels would have been the same without the proposed noise wall, but with the proposed commercial buildings.]

The unmitigated future DNL in outdoor activity areas, without noise barriers, are presented in Table 10, rounded to the nearest 0.5 dB. It can be seen from Table 10 that the future DNL will exceed the Fairfax County goal of 65 dB at the ½ basketball court and tot lot. The DNL will be much lower in the central courtyard, since it will be shielded by the proposed buildings. We assumed the tot lot would be located near the end of the noise wall shown on the drawing at the western side of the site. A noise barrier is required to shield the possible ½ basketball court and relocated tot lot.

Table 10. Unmitigated Future DNL in Outdoor Activity Areas

Location	DNL, dB
Tot Lot	69.5 - 71.5
Courtyard	56 – 60
½ Basketball Court	81 – 83

6.2 Metro Noise

We reviewed the Metro schedule for Vienna on the WMATA website. There are currently 83 scheduled trains during non-rush times (9:30 a.m. to 3 p.m., and 7:30 p.m. to 12 a.m.) on weekdays. Of those, 15 pass at night (between 10 p.m. and 7

a.m.). If it were assumed that 40 trains will pass the site each hour during rush-hour periods (5:30 to 9:30 a.m., and 3:00 to 7:30 p.m.) then the total number of trains would be 348 during the day and 75 at night. Since the DNL penalizes sounds at night by adding 10 dB, we determined the "effective" number of operations by adding the number of daytime operations plus ten times the number of nighttime operations. The result is an effective number of operations at Vienna of 1,098. We assumed that approximately this number would pass the site in the future.

Next we measured sound levels of a passing train on the Blue line between the Crystal City and Braddock Road stations. This location was selected because the trains are: (1) traveling at high speed as would be the case at our site, (2) the trains are at-grade as they would be at our site, and (3) there is no highway immediately near the tracks that would skew the measurements. We measured the Sound Exposure Level (SEL) to be 75.5 dB (averaged over five passbys) at a distance of approximately 200 feet from the tracks; this is approximately equal to the distance between the proposed buildings along I-66 and the proposed Metro line. The SEL is a measure of the total amount of sound energy of a noise event, normalized to a one-second period. The DNL due to Metro can be estimated by knowing the average SEL and the effective number of operations per day. The resulting unmitigated DNL due to Metro trains is 56.5 dB. This DNL is clearly far below (approximately 19 dB lower than) the unmitigated DNL due to I-66 and can be neglected. Once the noise wall is constructed the DNL due to Metro will be well under 50 dB.

7.0 Outdoor Noise Mitigation

We evaluated various noise barrier designs using TNM to mitigate the future DNL to 75 dB at the proposed townhouses, and to 65 dB at the tot lot and ½ basketball court. Using TNM we determined the resulting DNL at the townhouses as various noise barrier heights were considered.

The proposed location and top elevations of a proposed noise barrier are shown in Figure 3. We understand that one of the proffered conditions is that the noise wall not exceed a height of 35 feet. To comply with this proffer we recommend installing the noise wall on top of a retaining wall such that the height of the noise wall is no more than 35 feet on the residential side of the wall.

The mitigated future DNL at the townhouses with the proposed barrier shown in Figure 3 are shown in Figure 4.

It can be seen from Figure 4 that with the proposed noise barrier the DNL will not exceed 75 dB at any proposed residence. Also, the DNL at the ½ basketball court will be 60.5 to 61 dB, and the DNL at the tot lot will be 60 to 63 dB.

8.0 Indoor Noise Levels

The acoustical proffers for this project specify an indoor DNL of 45 dB. Once architectural drawings are available we can evaluate indoor noise levels. When the DNL is 75 dB or lower, it is always feasible to meet an indoor DNL of 45 dB, provided a detailed analysis is performed and the recommended upgraded doors, windows, and walls are used.

If you have any questions please call me at (703) 415-4550 extension 18.

Sincerely,

Gary E. Ehrlich, P.E.
Senior Acoustical Engineer

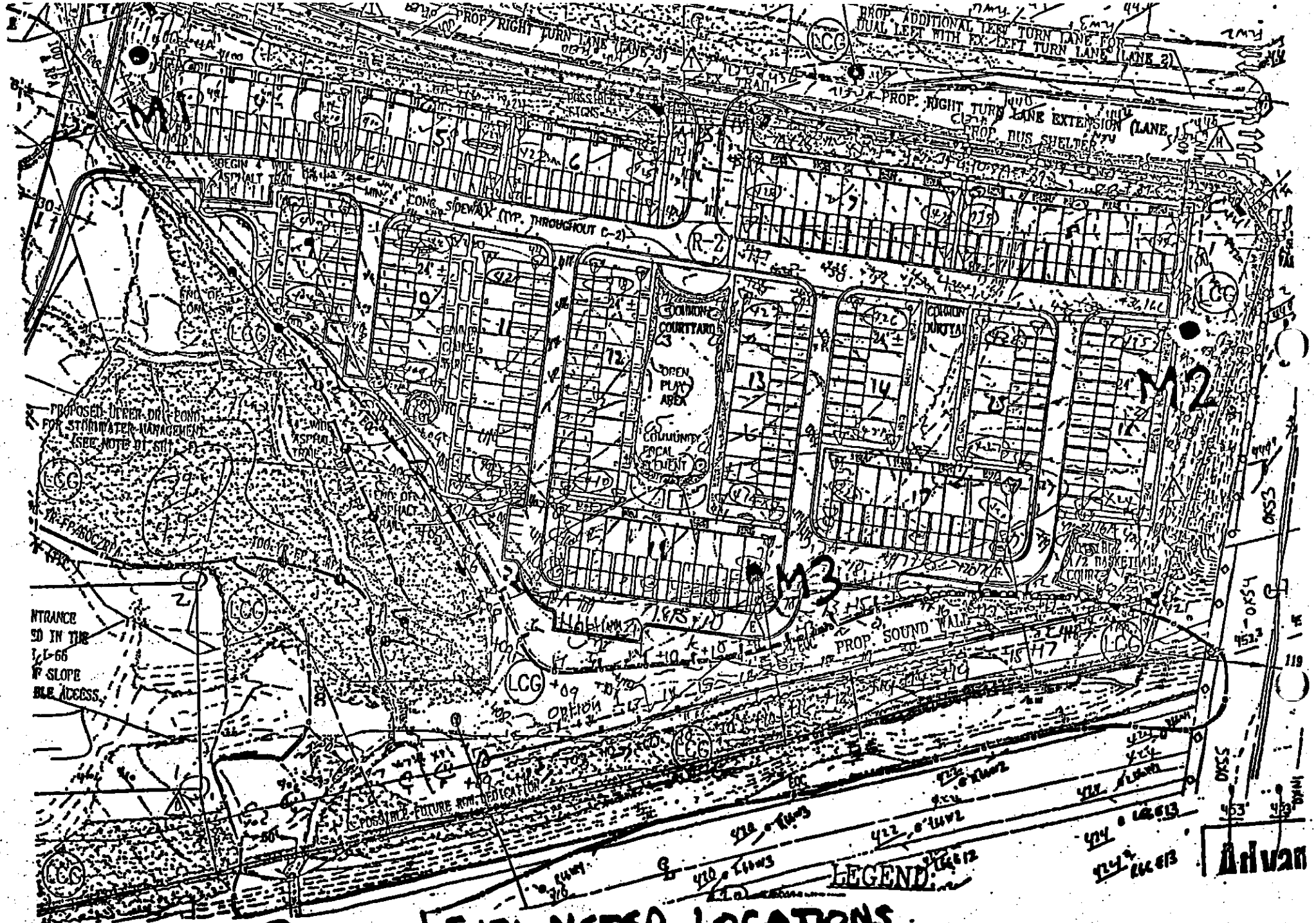


FIG. 1 SOUND LEVEL METER LOCATIONS

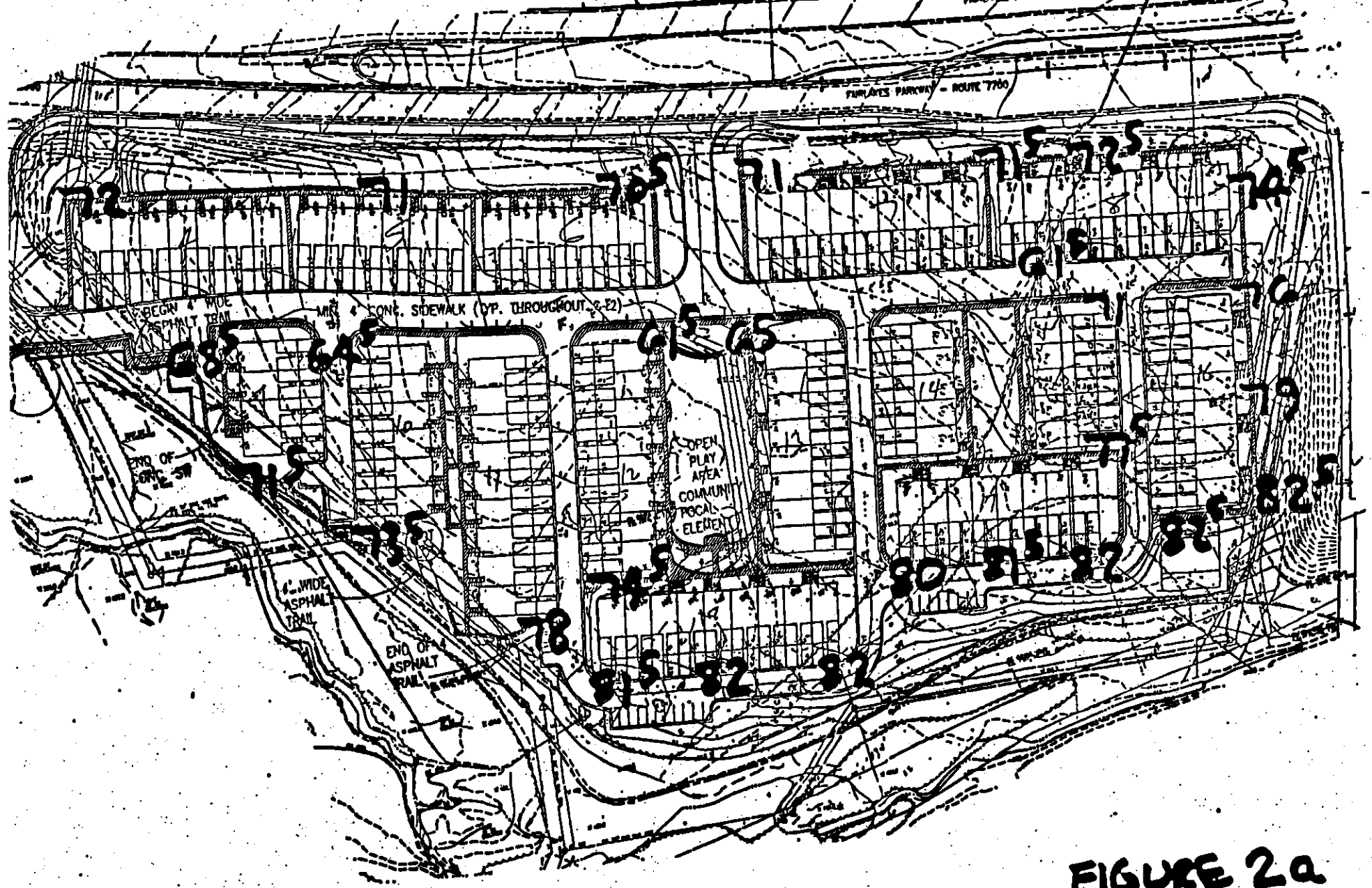
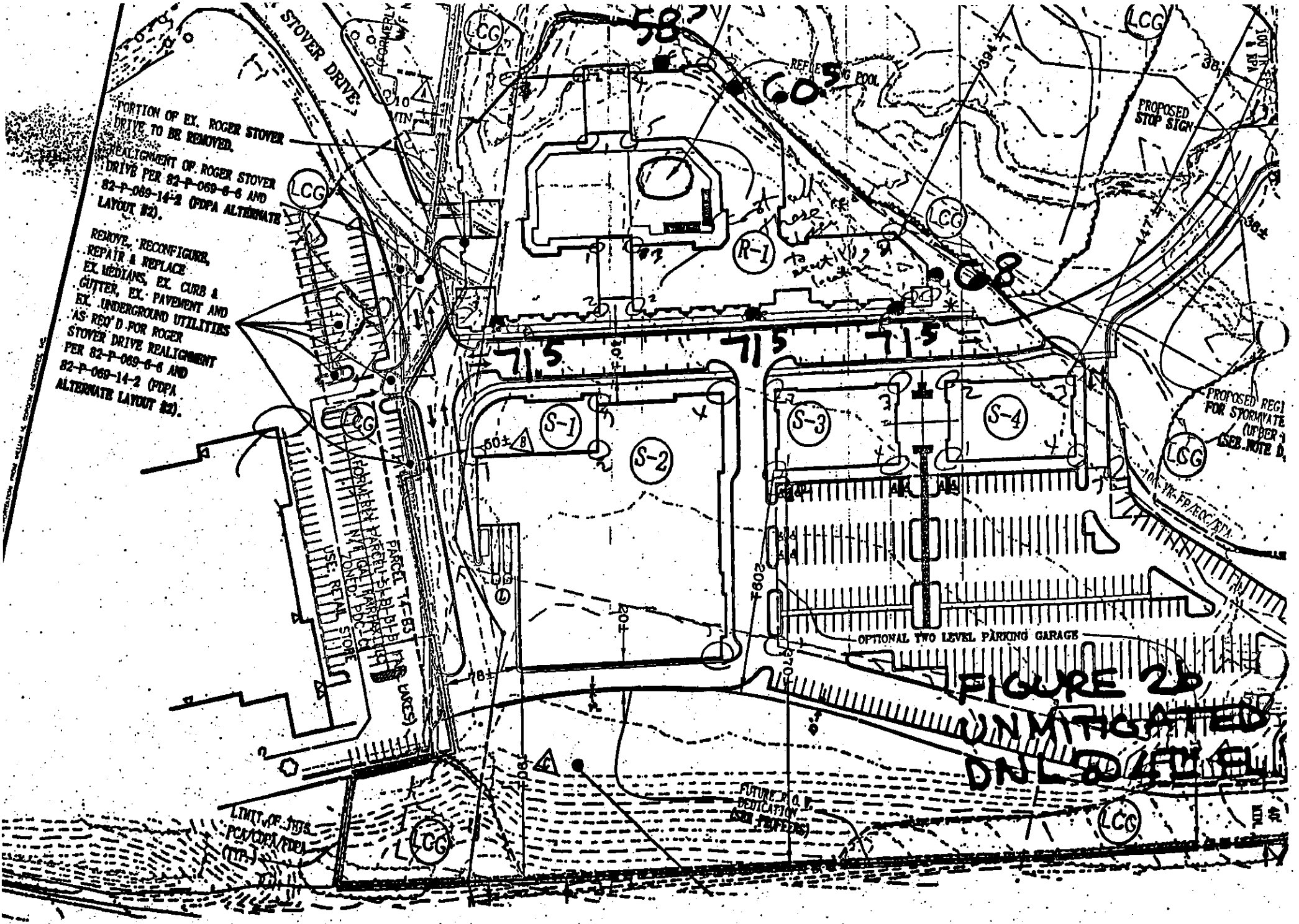


FIGURE 2a
UNMITIGATED
DNL@4TH FL.


STOVER DRIVE
PORTION OF EX. ROGER STOVER DRIVE TO BE REMOVED.
REALIGNMENT OF ROGER STOVER DRIVE PER 82-P-069-6-6 AND 82-P-069-14-2 (PDPA ALTERNATE LAYOUT #2).
REMOVE, RECONFIGURE, REPAIR & REPLACE EX. MEDIANS, EX. CURB & GUTTER, EX. PAVEMENT AND EX. UNDERGROUND UTILITIES AS REQ'D FOR ROGER STOVER DRIVE REALIGNMENT PER 82-P-069-6-6 AND 82-P-069-14-2 (PDPA ALTERNATE LAYOUT #2).
PROPOSED STOP SIGN
PROPOSED REGI FOR STORMWATE (UPPER
SEE NOTE D
OPTIONAL TWO LEVEL PARKING GARAGE
FUTURE R.O.W. DEDICATION
LIMIT OF THIS PCA/CDPA/FDPA (TYP.)
R-1
S-1
S-2
S-3
S-4
LCG
715
FIGURE 2b
UNMITIGATED
DNL 80 LEVEL

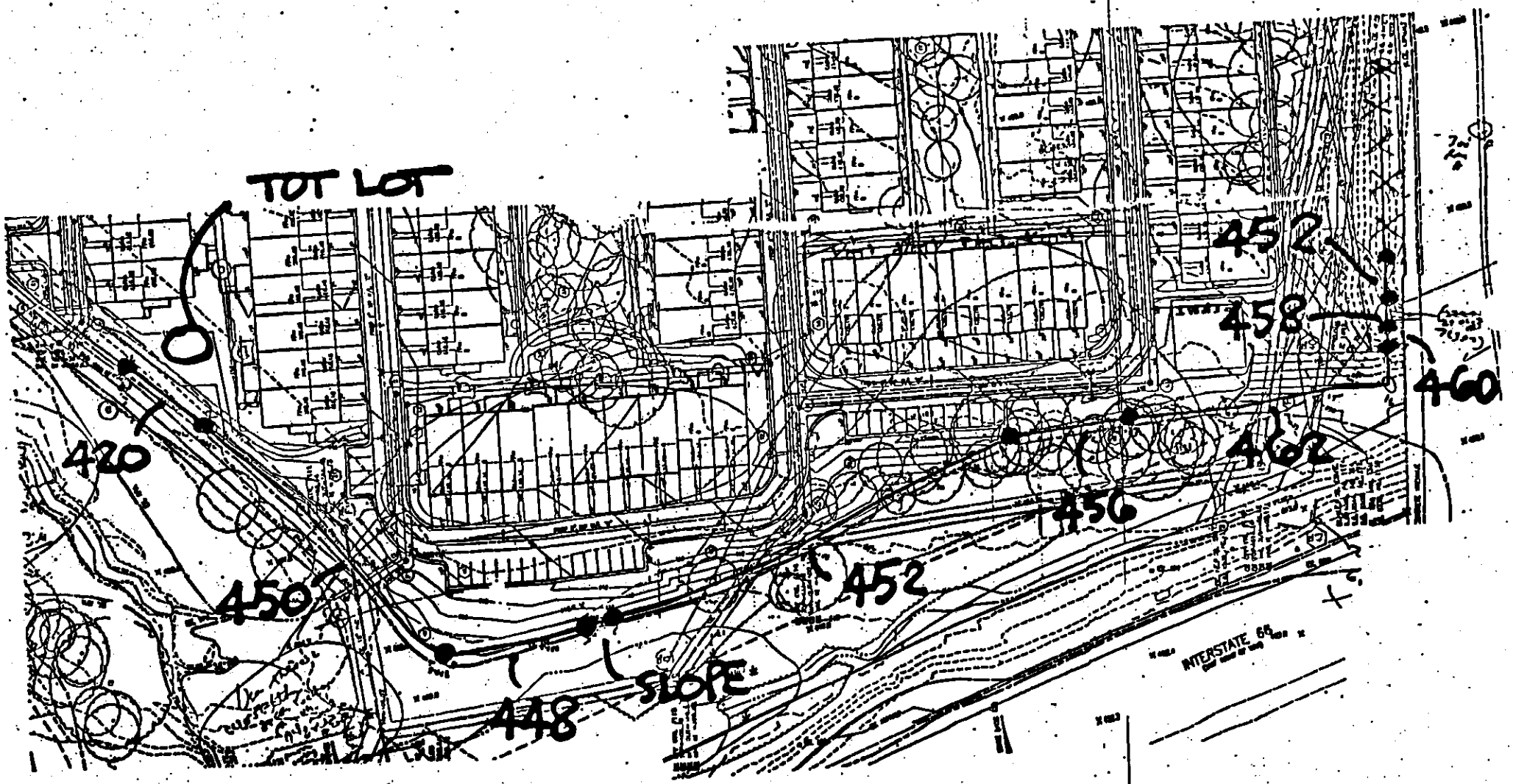


FIGURE 3
TOP-OF-WALL
ELEVATIONS

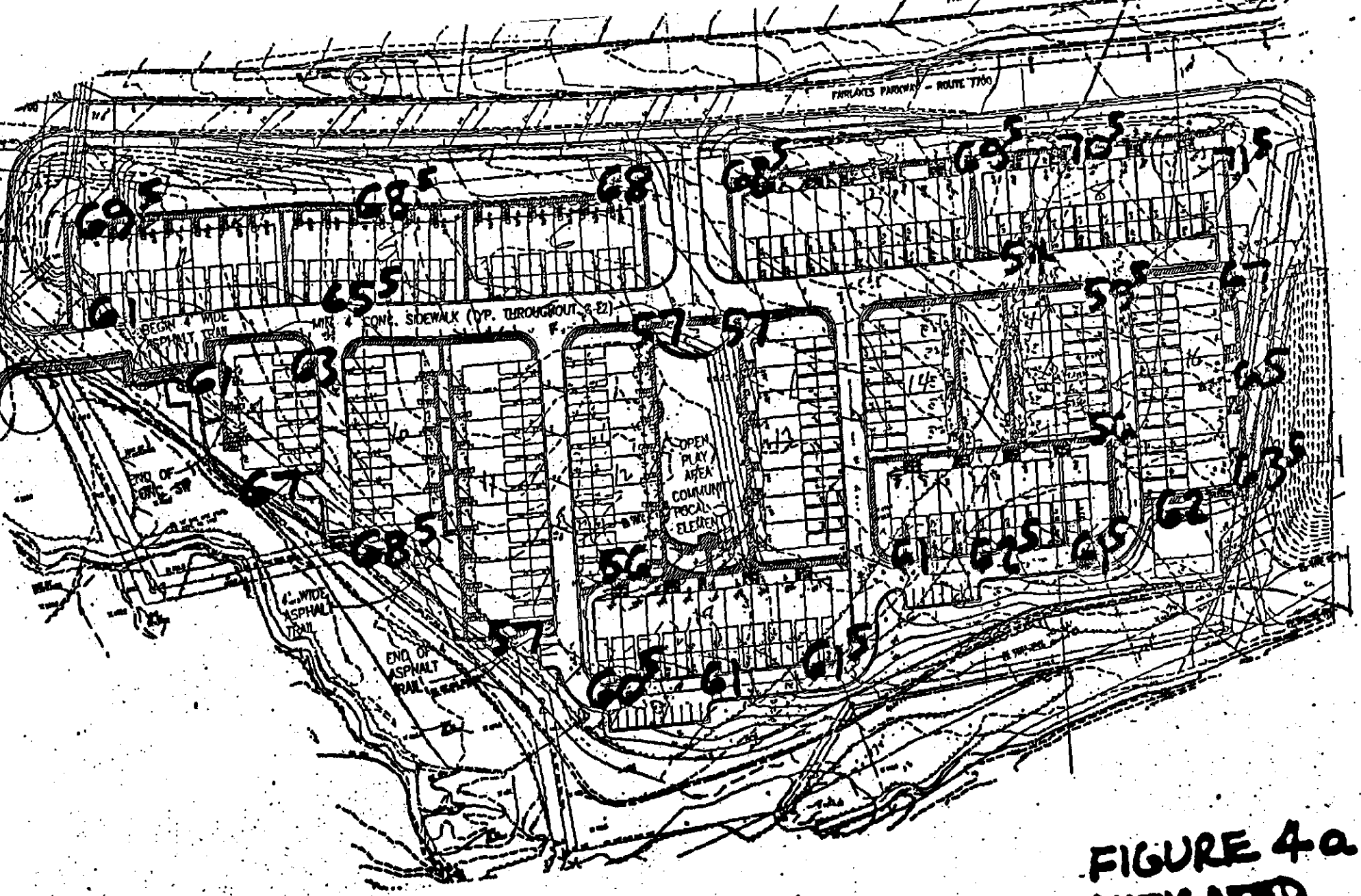


FIGURE 4a
MITIGATED
DNL @ 1ST FL.

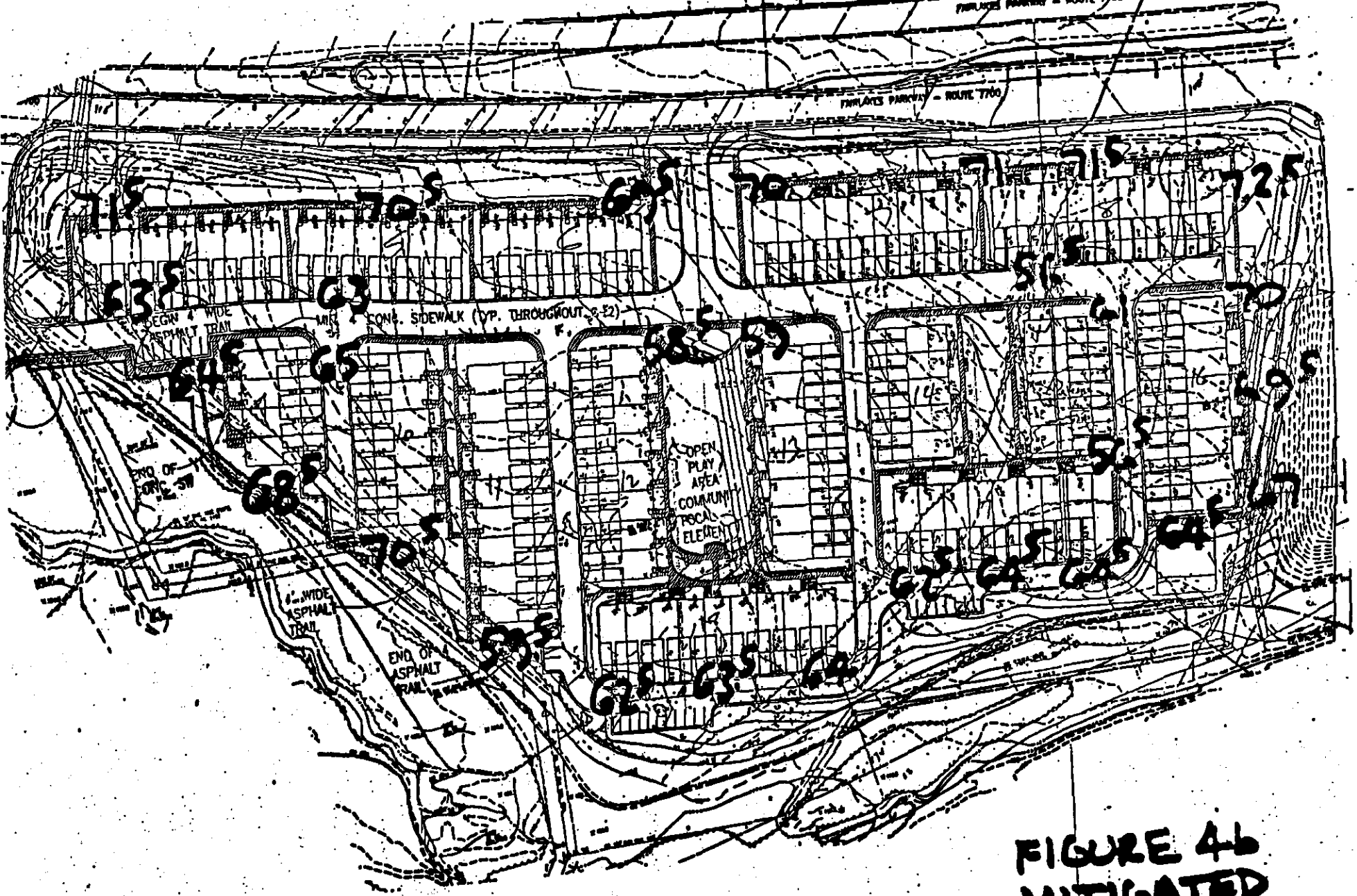


FIGURE 4b
MITIGATED
DNL @ 2ND FL.

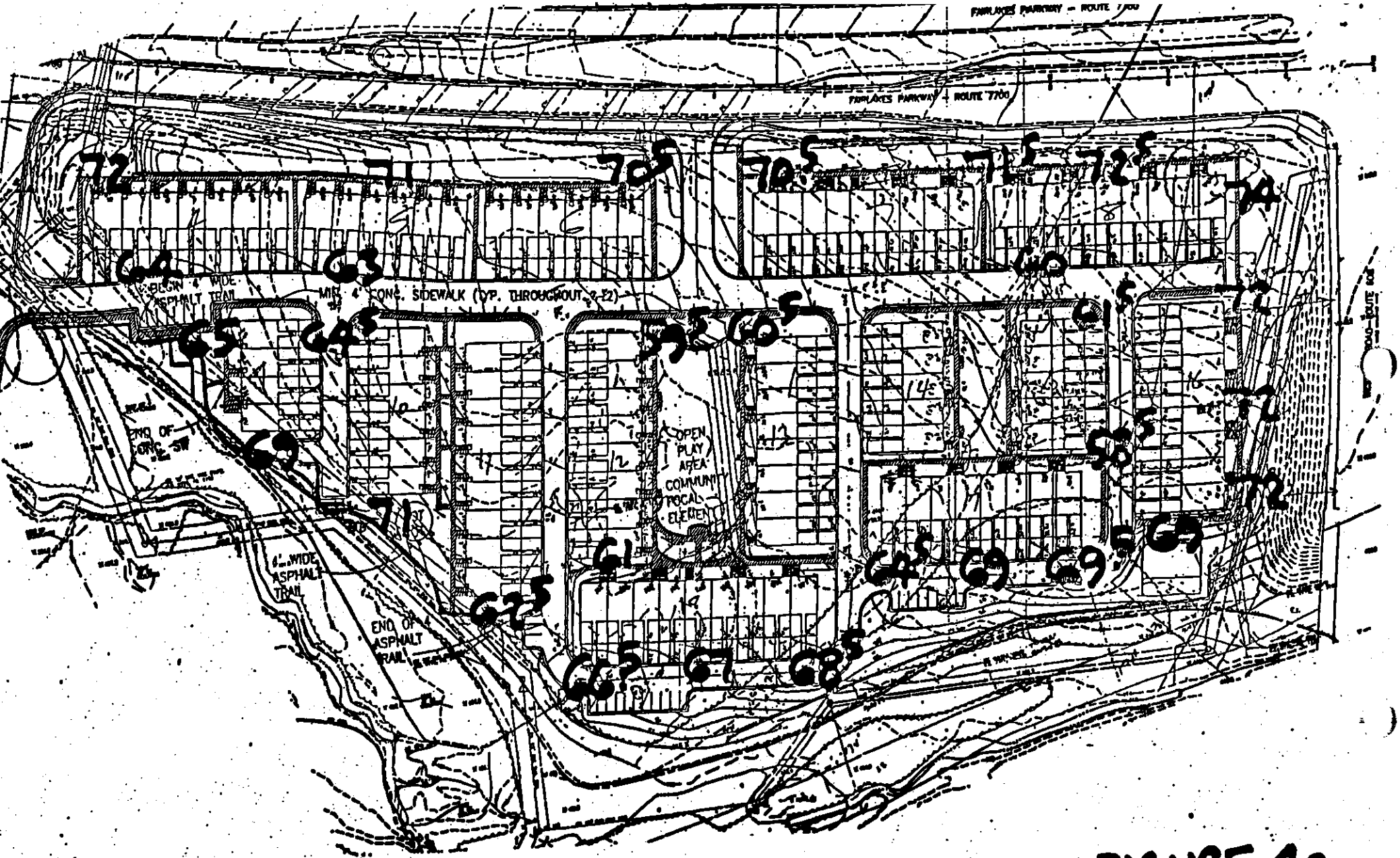


FIGURE 4C
MITIGATED
DNL @ 3rd FL.

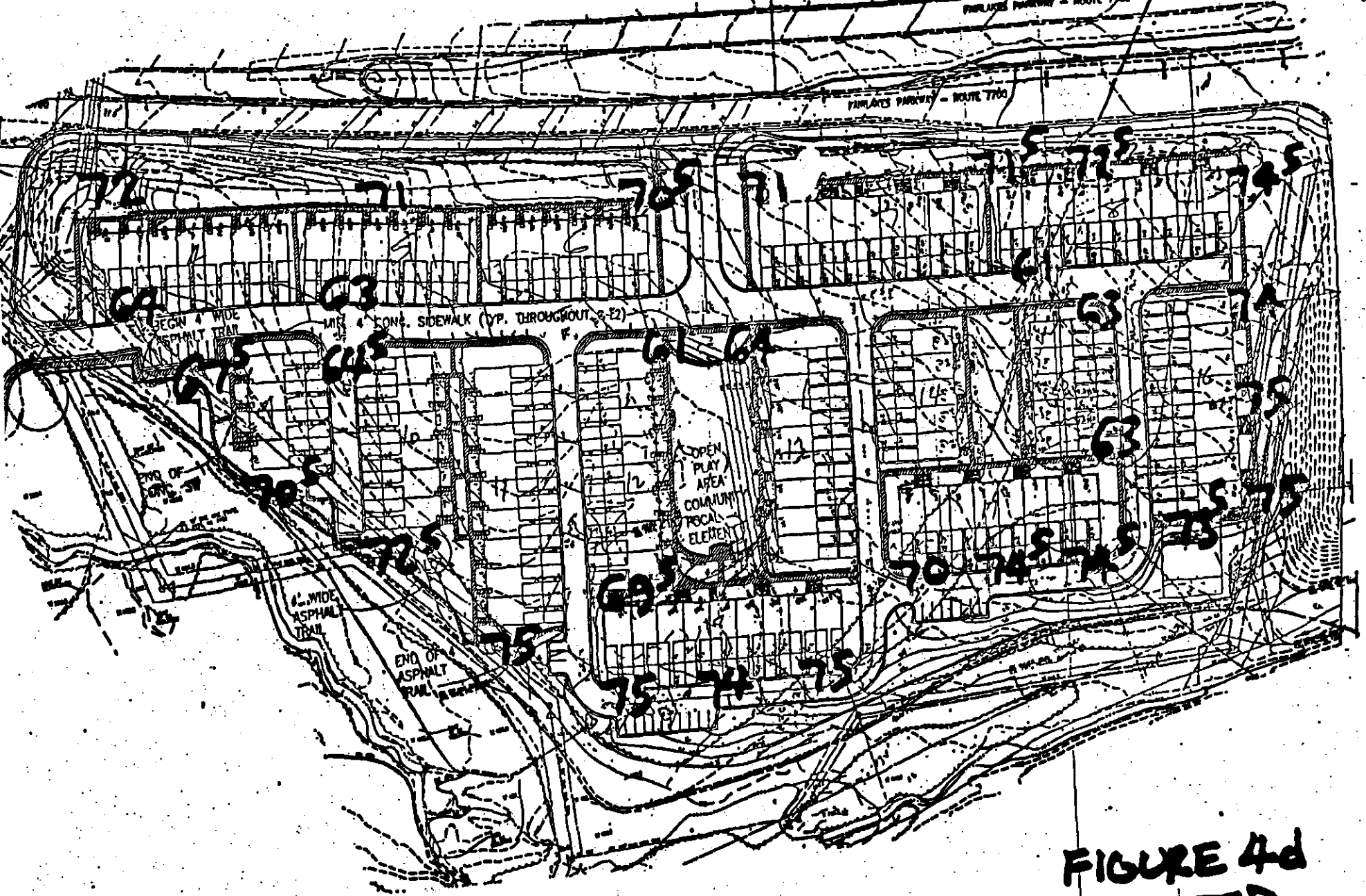
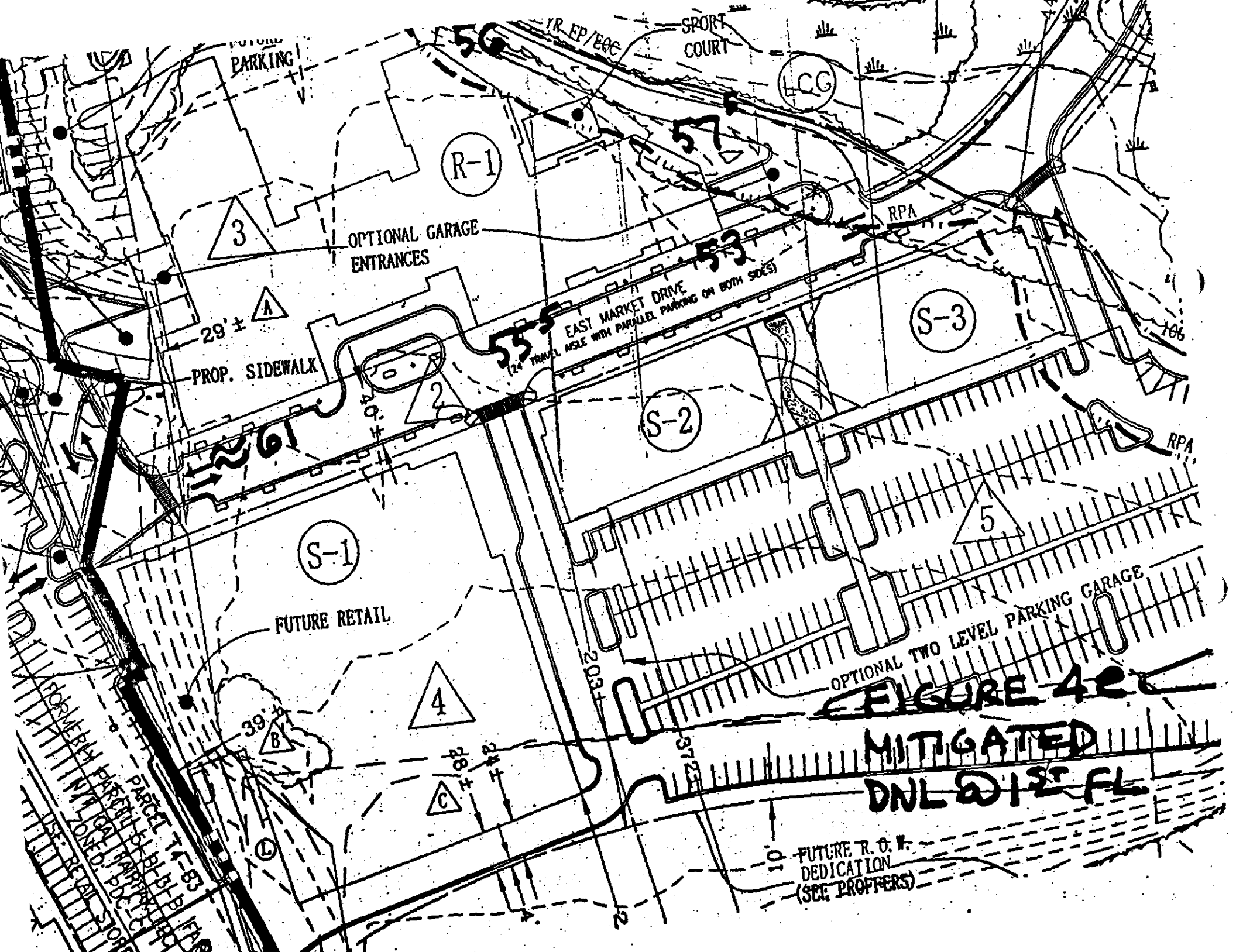


FIGURE 4d
MITIGATED
DNL @ 4TH FL.


FUTURE PARKING
YR EP/EQC
SPORT COURT
LCG
R-1
3
OPTIONAL GARAGE ENTRANCES
RPA
29'±
A
PROP. SIDEWALK
EAST MARKET DRIVE
(24' TRAVEL AISLE WITH PARALLEL PARKING ON BOTH SIDES)
S-3
2
S-2
RPA
5
S-1
FUTURE RETAIL
4
39'±
B
C
L
OPTIONAL TWO LEVEL PARKING GARAGE
203±
372±
FUTURE R.O.W. DEDICATION (SEE PROFFERS)
PARCEL 14-83
FORMERLY INVALOID PARCEL
FIGURE 4C
MITIGATED
DNL 61 ST FL

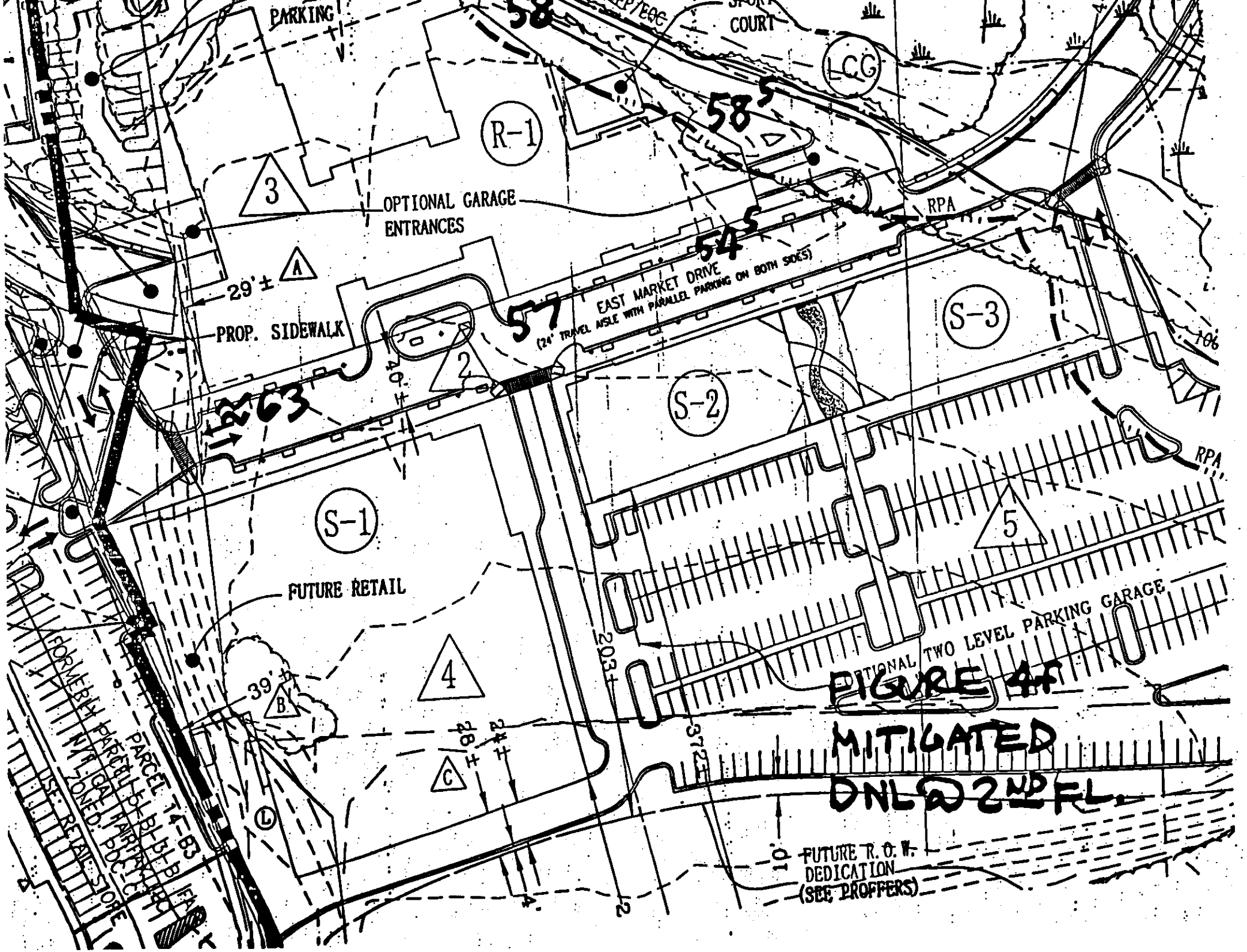
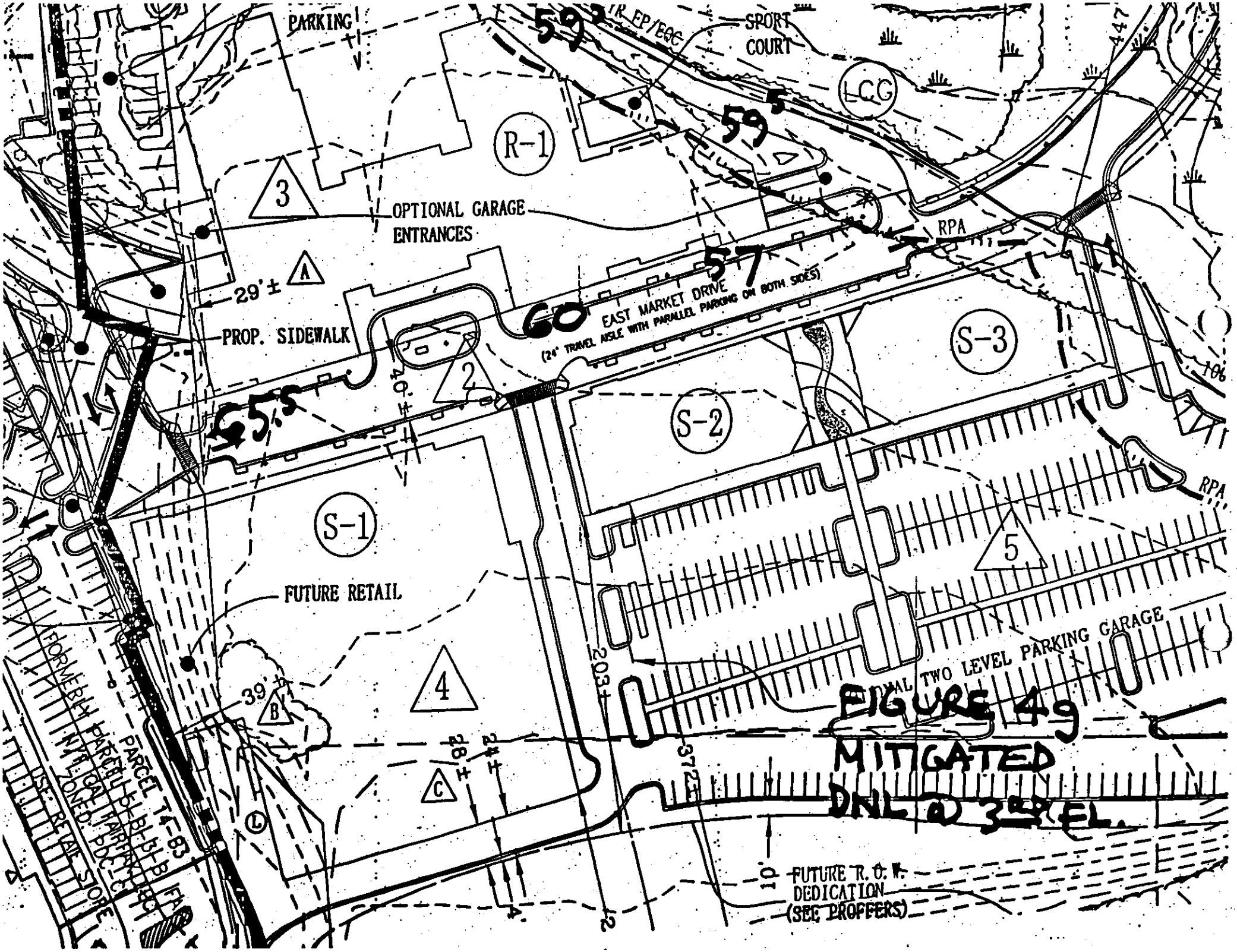
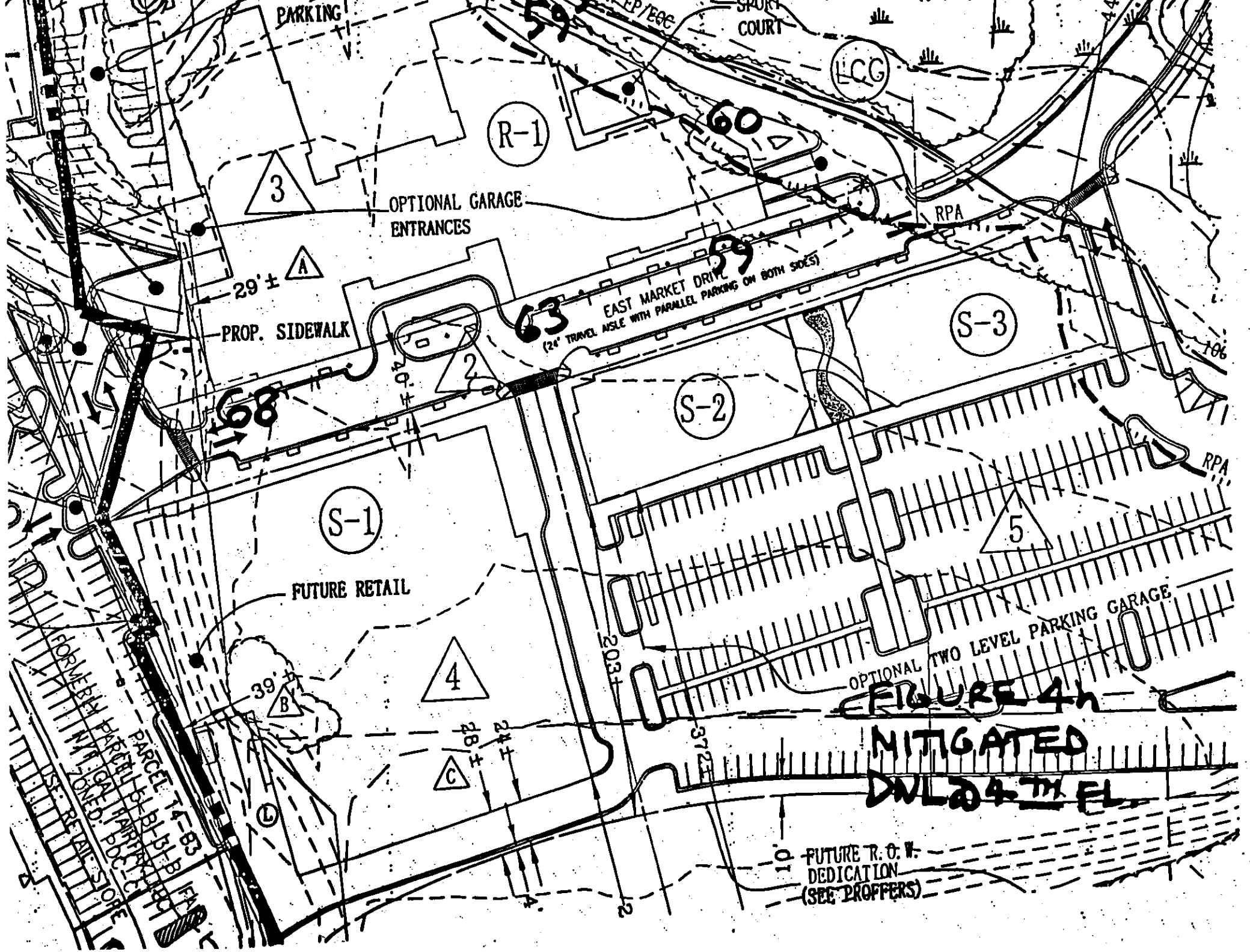


FIGURE 4F
MITIGATED
DNL @ 2ND FL.


PARKING
59
R/R EP/EOC
SPORT COURT
LCG
59
R-1
3
OPTIONAL GARAGE ENTRANCES
RPA
57
29'±
A
PROP. SIDEWALK
60
EAST MARKET DRIVE
(24' TRAVEL AISLE WITH PARALLEL PARKING ON BOTH SIDES)
S-3
2
49'±
55
S-2
S-1
FUTURE RETAIL
5
4
39'±
B
C
203'±
372'
28'±
24'±
10'
FUTURE R.O.W. DEDICATION (SEE PROFFERS)
TOTAL TWO LEVEL PARKING GARAGE
FIGURE 49
MITIGATED
DNL @ 35 EL.
PARCEL 14-83
FORMERLY PARCELS 14-83 & 14-84
NOW ZONED
DISTRICT RETAIL STORE
RPA
10%
447


PARKING
SPORT COURT
LCG
R-1
3
OPTIONAL GARAGE ENTRANCES
RPA
29'±
A
PROP. SIDEWALK
EAST MARKET DRIVE
(24' TRAVEL AISLE WITH PARALLEL PARKING ON BOTH SIDES)
2
S-3
S-2
S-1
FUTURE RETAIL
4
5
OPTIONAL TWO LEVEL PARKING GARAGE
39'±
B
C
L
203±
372±
FUTURE R.O.W. DEDICATION (SEE PROFFERS)
PARCEL 14-83
FORMERLY PARCEL 8-B-1-B-1-B-1
PARCEL 8-B-1-B-1-A-1
FORMERLY NT-1 ZONED
USE: RETAIL STORE
FIGURE 4h
MITIGATED
DVL 4TH FL

APPENDIX A

EXHIBIT 23-2. LOS CRITERIA FOR BASIC FREEWAY SEGMENTS

Criteria	LOS A	LOS B	LOS C	LOS D	LOS E
FFS = 75 mi/h					
Maximum density (pc/mi/ln)	11	18	26	35	45
Minimum speed (mi/h)	75.0	74.8	70.6	62.2	53.3
Maximum v/c	0.34	0.56	0.76	0.90	1.00
Maximum service flow rate (pc/h/ln)	820	1350	1830	2170	2400
FFS = 70 mi/h					
Maximum density (pc/mi/ln)	11	18	26	35	45
Minimum speed (mi/h)	70.0	70.0	68.2	61.5	53.3
Maximum v/c	0.32	0.53	0.74	0.90	1.00
Maximum service flow rate (pc/h/ln)	770	1260	1770	2150	2400
FFS = 65 mi/h					
Maximum density (pc/mi/ln)	11	18	26	35	45
Minimum speed (mi/h)	65.0	65.0	64.6	59.7	52.2
Maximum v/c	0.30	0.50	0.71	0.89	1.00
Maximum service flow rate (pc/h/ln)	710	1170	1680	2090	2350
FFS = 60 mi/h					
Maximum density (pc/mi/ln)	11	18	26	35	45
Minimum speed (mi/h)	60.0	60.0	60.0	57.8	51.1
Maximum v/c	0.29	0.47	0.68	0.88	1.00
Maximum service flow rate (pc/h/ln)	660	1080	1560	2020	2300
FFS = 55 mi/h					
Maximum density (pc/mi/ln)	11	18	26	35	45
Minimum speed (mi/h)	55.0	55.0	55.0	54.7	50.0
Maximum v/c	0.27	0.44	0.64	0.85	1.00
Maximum service flow rate (pc/h/ln)	600	990	1430	1910	2250

Note:
The exact mathematical relationship between density and v/c has not always been maintained at LOS boundaries because of the use of rounded values. Density is the primary determinant of LOS. The speed criterion is the speed at maximum density for a given LOS.

The average of all passenger-car speeds measured in the field under low- to moderate-volume conditions can be used directly as the FFS of the freeway segment. This speed reflects the net effect of all conditions at the study site that influence speed, including those considered in this method (lane width, lateral clearance, interchange density, and number of lanes) as well as others such as speed limit and vertical and horizontal alignment. Speed data that include both passenger cars and heavy vehicles can be used for level terrain or moderate downgrades but should not be used for rolling or mountainous terrain.

Estimate free-flow speed if measurement is not possible

If field measurement of FFS is not possible, FFS can be estimated indirectly on the basis of the physical characteristics of the freeway segment being studied. The physical characteristics include lane width, number of lanes, right-shoulder lateral clearance, and interchange density. Equation 23-1 is used to estimate the free-flow speed of a basic freeway segment:

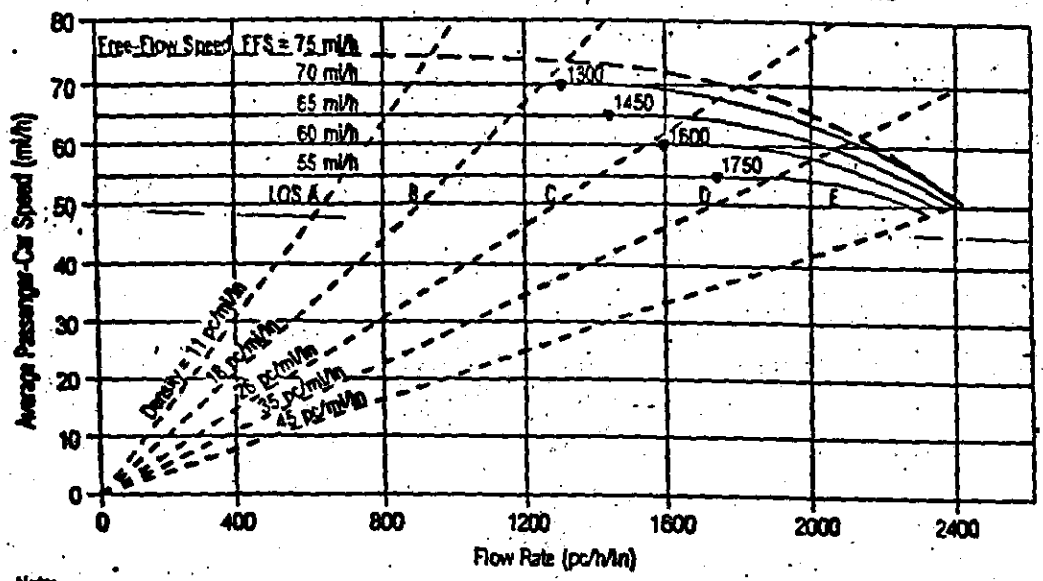
$$FFS = BFFS - f_{LW} - f_{LC} - f_N - f_{ID} \quad (23\text{-}1)$$

where

FFS = free-flow speed (mi/h);
$BFFS$ = base free-flow speed, 70 mi/h (urban) or 75 mi/h (rural);
f_{LW} = adjustment for lane width from Exhibit 23-4 (mi/h);
f_{LC} = adjustment for right-shoulder lateral clearance from Exhibit 23-5 (mi/h);

f_N = adjustment for number of lanes from Exhibit 23-6 (mi/h); and
f_{ID} = adjustment for interchange density from Exhibit 23-7 (mi/h).

EXHIBIT 23-3. SPEED-FLOW CURVES AND LOS FOR BASIC FREEWAY SEGMENTS



Note:
Capacity varies by free-flow speed. Capacity is 2400, 2350, 2300, and 2250 pc/h/ln at free-flow speeds of 70 and greater, 65, 60, and 55 mi/h, respectively.

For $70 < FFS \le 75$
$(3400 - 30FFS) < v_p \le 2400$

$$S = FFS - \left[\left(FFS - \frac{160}{3}\right)\left(\frac{v_p + 30FFS - 3400}{30FFS - 1000}\right)^{2.6}\right]$$

For $55 \le FFS \le 70$ and for flow rate (v_p)
$(3400 - 30FFS) < v_p \le (1700 + 10FFS)$,

$$S = FFS - \left[\frac{1}{9}(7FFS - 340)\left(\frac{v_p + 30FFS - 3400}{40FFS - 1700}\right)^{2.6}\right]$$

For $55 \le FFS \le 75$ and
$v_p \le (3400 - 30FFS)$,
$S = FFS$

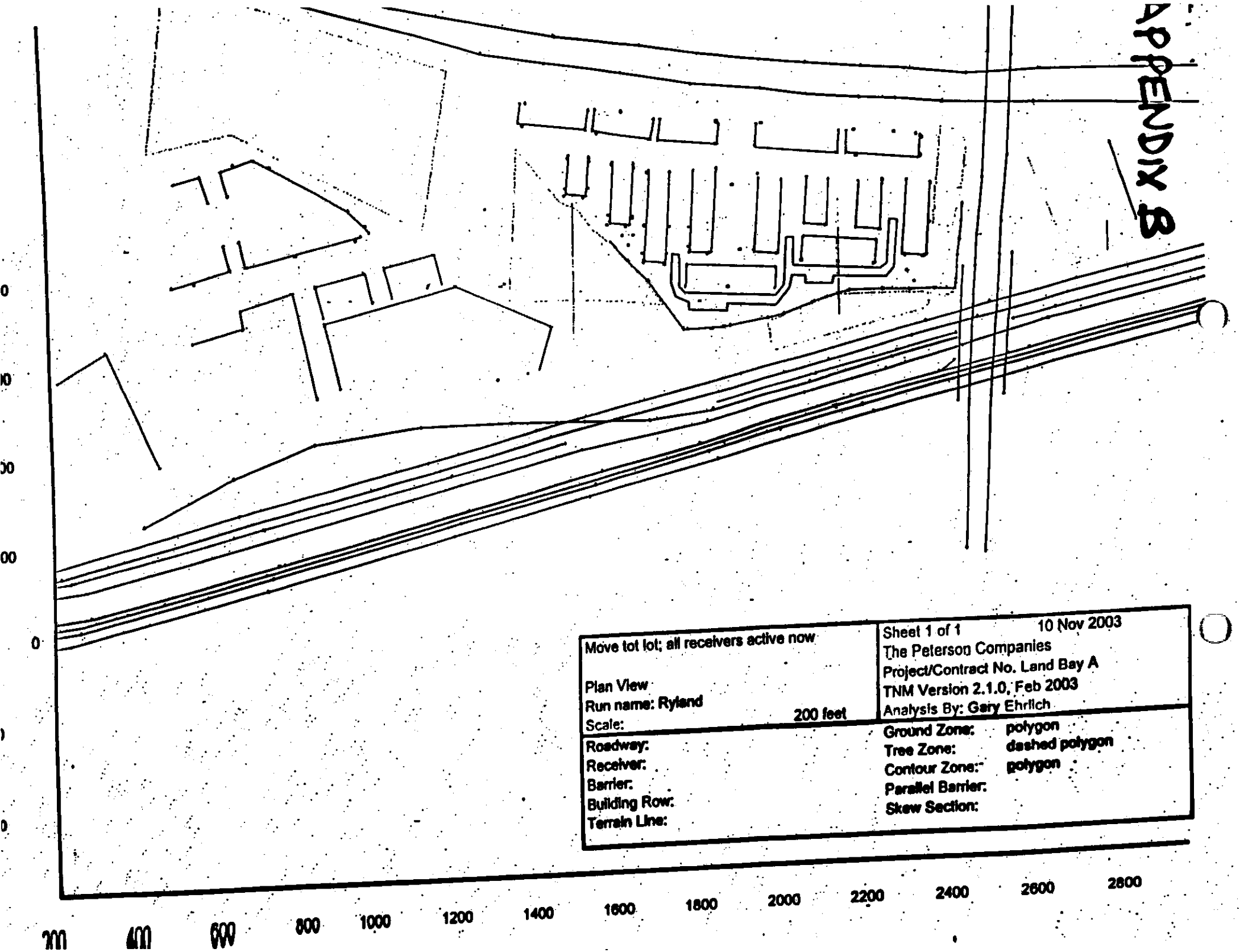
BFFS

Estimation of FFS for an existing or future freeway segment is accomplished by adjusting a base free-flow speed downward to reflect the influence of four factors: lane width, lateral clearance, number of lanes, and interchange density. Thus, the analyst is required to select an appropriate BFFS as a starting point.

Adjustment for Lane Width

The base condition for lane width is 12 ft or greater. When the average lane width across all lanes is less than 12 ft, the base free-flow speed (e.g., 75 mi/h) is reduced. Adjustments to reflect the effect of narrower average lane width are given in Exhibit 23-4.

APPENDIX B


Move tot lot; all receivers active now
Plan View
Run name: Ryland
Scale: 200 feet
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Sheet 1 of 1
10 Nov 2003
The Peterson Companies
Project/Contract No. Land Bay A
TNM Version 2.1.0, Feb 2003
Analysis By: Gary Ehrlich
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:
0
200
400
600
800
1000
1200
1400
1600
1800
2000
2200
2400
2600
2800

PPENDIX C

Noise Study Summary Information

The following form must be completed and provided with any noise study which is used to satisfy the requirements of Par. 1 of Sect. 8-919 or Par. 3F of Sect. 10-104 of the Zoning Ordinance, except for noise barriers on a single residential lot.

Tax Map Number and/or Address of Property
56-1

Proposed Use of the Property
Townhouses, condominiums, and commercial buildings

Name(s) and Route Number(s) of Road(s) for which Noise Barrier is Proposed
I-66, West ox Road, and Fair Lakes Parkway

Comprehensive Plan Recommendation for Portion of Road(s) which Abut(s) the Property and for which Noise Barrier is Proposed (i.e. improve to six lanes, service road, future right-of-way width, etc.)
Widen I-66 to 10 lanes (including HOV lanes)

Current Average Daily Traffic (ADT) and/or Peak Hour Traffic (please specify which) per road
9696 (I66); 2,244 (West ox Road); 1,812 (Fair Lakes Pkwy) Peak-hour

Projected ADT and/or Peak Hour Traffic (please note time horizon, i.e. 20 years into the future) per road
241,429 (I66); 40,000 (West ox Road); 49,100 (Fair Lakes Pkwy) ADT

Data source(s) for current and projected traffic and justification for projected traffic
5-minute counts June 9, 2003
ADT forecasts all from Fairfax County for 2002 (+3%/yr to 2025) for I66, for 2015 for West ox Road, and 2020 for Fair Lakes Pkwy.

Posted Speed Limit (mph) 55 mph on I66

	I66	HOV	West ox + F.L.P.
Passenger Vehicles as a % of the ADT and/or Peak Hour	96	99	96
Medium Trucks as a % of the ADT and/or Peak Hour	1	0	2
Heavy Trucks as a % of the ADT and/or Peak Hour	2	0	1
Buses:	1	1	1

Source of Vehicle Mix Information Traffic counts June 9, 2003 605-640 pm

Characteristics of Traffic Flow during on-site monitoring (i.e. free flowing at posted speed,

moving below posted speed, stand still)
Free-flowing at full speed on TGE and Fair Lakes Pkwy, but only 0-25 mph on West Ox Road

Weather and road conditions during on-site monitoring (i.e. wet pavement, dry pavement, snow cover, wind speed) Rain Wed. 6/11 7-10pm and most of Thur. 6/12

Dates and times (including duration) of on-site monitoring 6pm Monday June 9, 2003 through 9am Friday June 13, 2003 ; 3 days and 15 hours total

Provide a map showing the locations of all on-site monitoring sites. (See Figure 1 of report)

Noise Model Used TNM 2.1

Run noise model using existing conditions and discuss how that information was used to calibrate future predictions.
The traffic counts were input into TNM. The output was compared to the sound levels measured during the counts. They agreed very well (+/- 0.7 dB).

Provide a map or plat of the property which delineates the projected unmitigated DNL 65, 70 and 75 dba noise contours at both the ground and above ground levels. The above ground level is defined as the noise levels at the second story (approximately 15 feet above ground). If the proposed building(s) has more than two stories, the contours for the upper levels must also be provided, or documentation provided that demonstrates that there will be no change in noise levels above a certain elevation. The above ground level at the third story is approximately 27 feet above ground, with 12 feet being added for each additional story. It is noted that there may be instances where the projected unmitigated noise contours may be difficult to determine and/or depict given the presence of existing structures or other features on the site. In such circumstances, it may be appropriate to provide noise data points for the critical areas on the site before construction on the site in lieu of providing the projected unmitigated noise contours. ✓

Provide a map or plat of the property which delineates the projected mitigated DNL 65, 70 and 75 dBA noise contours at both the ground and above ground levels. The above ground level is defined as the noise levels at the second story (approximately 15 feet above ground). If the proposed building(s) has more than two stories, the contours for the upper levels must also be provided, or documentation provided that demonstrates that there will be no change in noise levels above a certain elevation. The above ground level at the third story is approximately 27 feet above ground, with 12 feet being added for each additional story. It is noted that there may be instances where the projected mitigated noise contours may be difficult to determine and/or depict given the future barrier(s) and other structures or features on the site. In such circumstances, it may be appropriate to provide noise data points for the critical areas on the site after construction on the site (including barrier construction) in lieu of providing the projected mitigated noise contours. ✓
Note: The projected mitigated and unmitigated noise contours may be depicted on the same map

or plat provided that it can be done in such a manner which is clear and legible.

Description and Illustration of the Proposed Noise Barrier. This discussion and illustration must include the height of the proposed barrier, the proposed location of the barrier on the property, the acoustical design and structural features of the barrier, building materials to be used in the construction of the barrier and any connections to an adjacent barrier(s). This description must also include a discussion of any future road improvements as recommended by the Comprehensive Plan and whether the proposed barrier location is impacted by such recommendations. Additional sheets and illustrations may be attached if necessary.

See Figure 3. The proposed barrier is 30 to 42 feet tall along I-66 and 8 to 35 feet tall along West Ox Road. The wall is immediately along the EQC area boundary along I66 and parallel to the shoulder of West Ox Road. The proposed material is precast concrete panels on steel H-columns. Widening I-66 will not affect the wall since it is outside the I-66 R.O.W. No changes to West Ox Road are proposed. ⊛

Discuss How the Proposed Development Supports the Attainment of Exterior Noise Mitigation Recommendations of the Comprehensive Plan. The Comprehensive Plan recommends that new development should not expose people to an exterior noise level in excess of DNL 65 dBA for outdoor activity areas including outdoor recreation areas of homes. In addition, new residential development should not occur in areas with projected highway noise exposure exceeding DNL 75 dBA. As such, please describe how the proposed noise barrier addresses the Plan's recommendations for exterior noise mitigation. Additional sheets may be attached if necessary.

Through the design process changes were made to mitigate noise. These include deleting four 4-story townhouses and relocating the tot lot. The final layout includes a tall noise wall. The resulting DNL will not exceed 65 dB in outdoor use areas or 75 dB at the buildings.

Description and Illustration of Efforts to Mitigate the Visual Impacts of the Noise Barrier on Adjacent Properties. This description and illustration must describe/show the visual impacts on adjacent properties to include the location and design of the barrier, use of berms and landscaping. Additional sheets may be attached if necessary.

The proposed noise barrier is located along the EQC area. The trees in this area will tend to hide the wall somewhat from adjacent properties. Also, the wall is generally set back from the property line. During final design landscaping will be designed.

Noise Study Summary Information for Individual Residential Lots

The following form must be completed and provided with any noise study which is used to satisfy

⊛ Retaining walls will be used to ensure that the wall does not exceed 35 feet tall on the residential side of the wall.

wyle laboratories

December 22, 2003 J/N 48703

Mr. Jeff Saxe
The Peterson Companies
12500 Fair Lakes Circle
Fairfax, Virginia 22033

Reference: East Market at Fair Lakes Outdoor Noise Analysis

Dear Mr. Saxe:

This letter is an addendum to our November 10, 2003 outdoor noise level analysis for the East Market at Fair Lakes residential project located along I-66, West Ox Road, and Fair Lakes Parkway in Fairfax County, Virginia. This addendum is for alternate noise wall locations farther from the proposed residences, as well as changes in the condo portion of the site. The assumptions contained in that report are still applicable; only sections 6.1 "Unmitigated Future Outdoor Highway Noise" and 7.0 "Outdoor Noise Mitigation" from the November 10, 2003 report are affected.

The proposed location and top elevations (in feet) of a possible noise barrier are shown in the attached Figure. The mitigated future DNL with the proposed barrier at the first through fourth floors of the townhouses are shown in the attached figures.

In our earlier report we had assumed that the height of the commercial buildings would be 59 feet. We now believe that the height will be 40 feet. For this report we also evaluated the possibility of a nine-story condominium building, in addition to a four-story building. We used the same building footprint for the nine-story building as for the four-story case. We used a building height of 85 feet with a top-of-window height of 83 feet for the ninth floor. We also considered the possibility that the fifth through ninth floors would be set back 15' from the face of the building along I-66. The DNL at the condominium building were re-calculated with the correct commercial building height, and with the four- and nine-story condominium building. The future DNL at the loudest portion of the condominium building with and without the commercial buildings are shown in Table 1.

Wyle Laboratories, Inc. 2001 Jefferson Davis Highway, Suite 701, Arlington, VA 22202-3804 Tel: 703/415-4550, Telecopy: 703/415-4558

Table 1. DNL at Loudest Portion of Condominium Building

Location	With Commercial Buildings and Noise Wall	Without Commercial Buildings or Noise Wall
1st Floor	57 dB	65 dB
2nd Floor	59 dB	68 dB
3rd Floor	62 dB	69.5 dB
4th Floor	67.5 dB	71.5 dB
5th Floor – no setback	70 dB	72.5 dB
6th Floor – no setback	73 dB	73.5 dB
7th Floor – no setback	74.5 dB	74.5 dB
8th Floor – no setback	75.5 dB	75.5 dB
9th Floor – no setback	76 dB	76 dB
5th Floor – 15' setback	69.5 dB	72.5 dB
6th Floor – 15' setback	73 dB	73.5 dB
7th Floor – 15' setback	73.5 dB	74 dB
8th Floor – 15' setback	74.5 dB	74.5 dB
9th Floor – 15' setback	75 dB	75 dB

It can be seen from the attached figures that with the proposed noise barrier the DNL will not exceed the Fairfax County goal of 75 dB at any proposed townhouse. It can be seen from Table 1 that the DNL will not exceed 75 dB at any condominium building, with or without the commercial buildings or noise barrier, provided the 8th and 9th floors step back 15 feet or more.

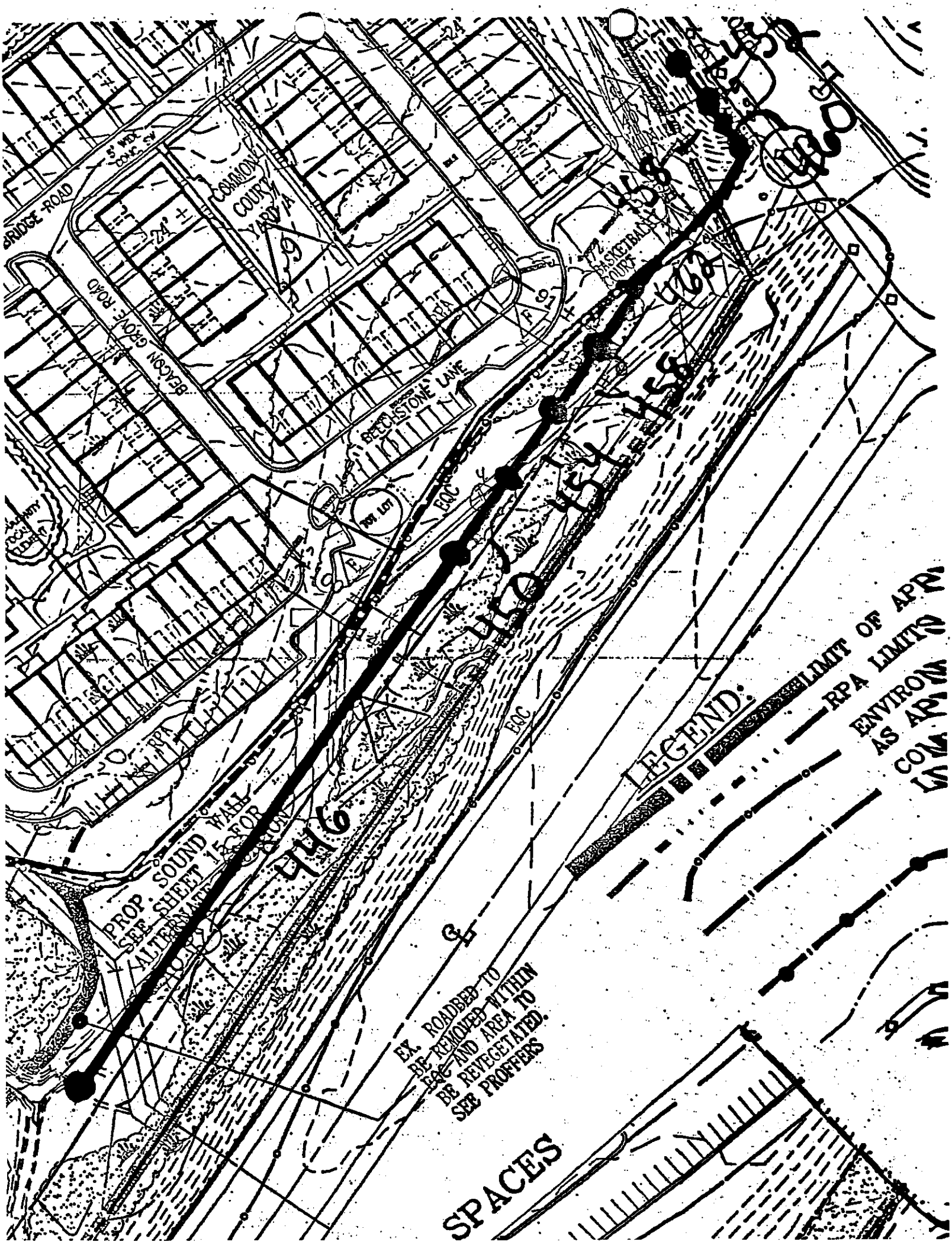
We used the new location of the tot lot at the corner of Beechstone Lane and Beacon Grove Road, and we assumed the elevation of the tot lot would be approximately 424 feet. The DNL at the tot lot will be 63.5 to 64 dB, and the DNL at the half basketball court will be 62.5 to 63 dB; these meet the Fairfax County goal of 65 dB.

If you have any questions please call me at (703) 415-4550 extension 18.

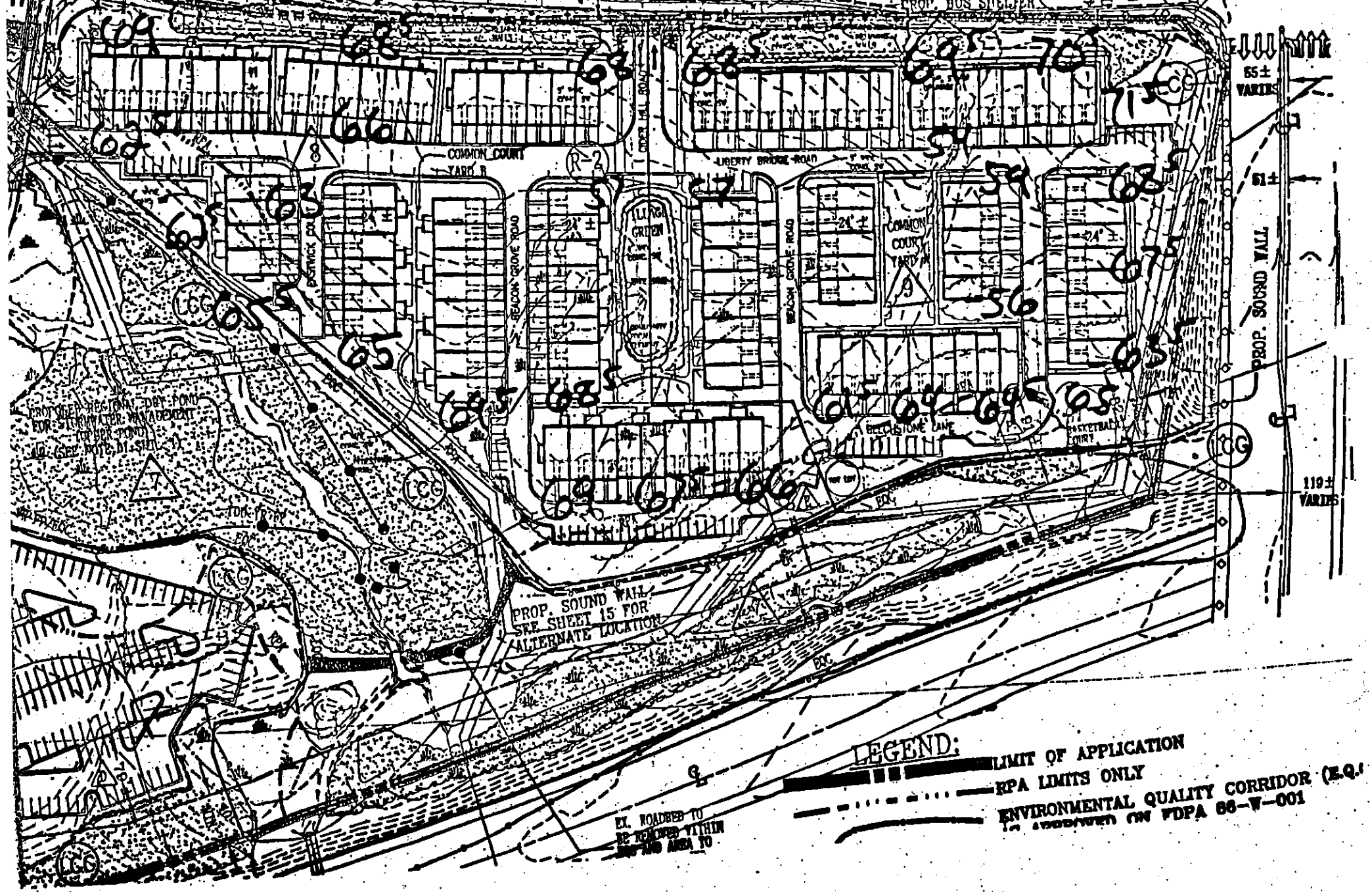
Sincerely,

Gary E. Ehrlich, P.E.
Senior Acoustical Engineer

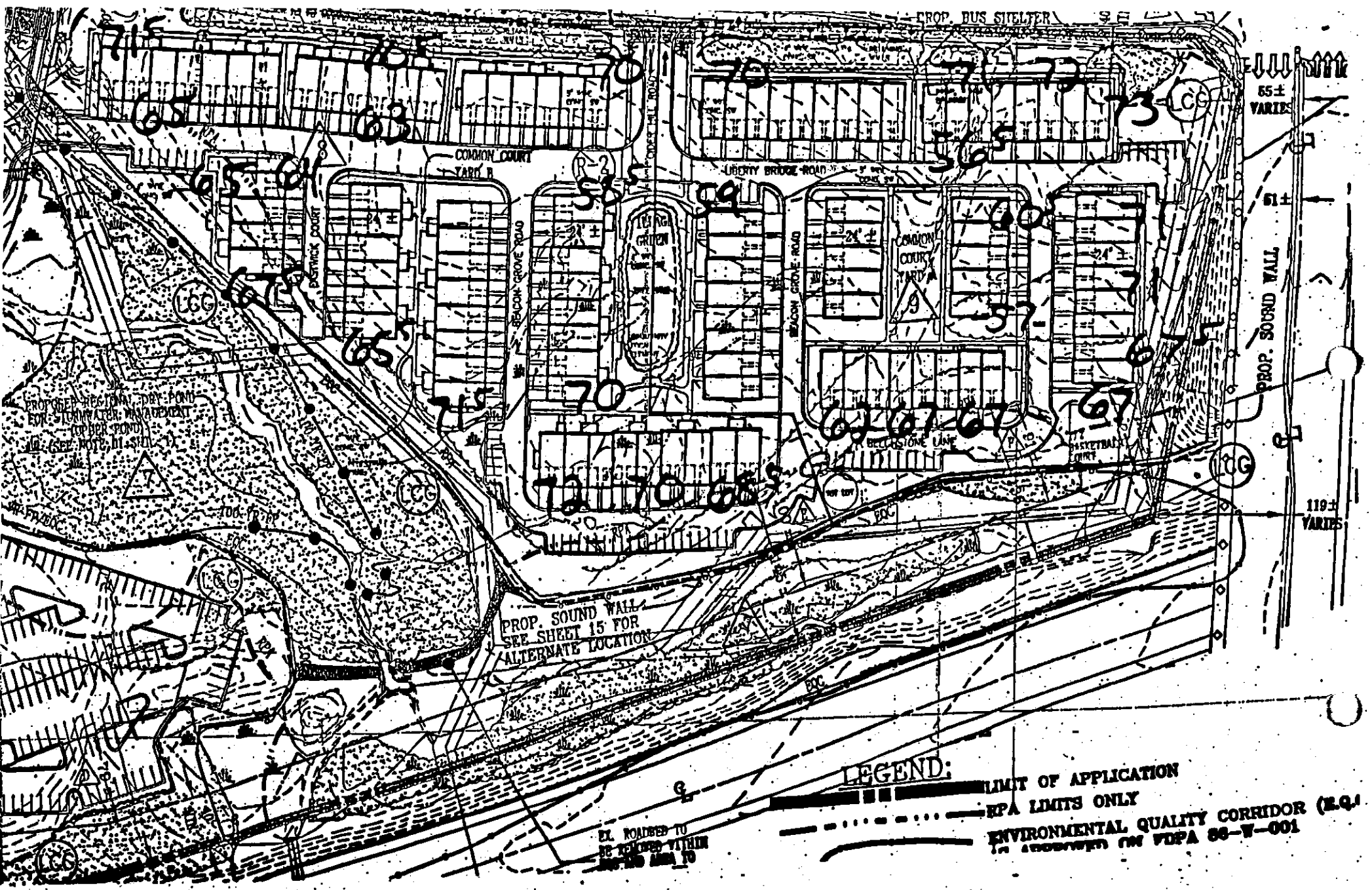
wyle laboratories



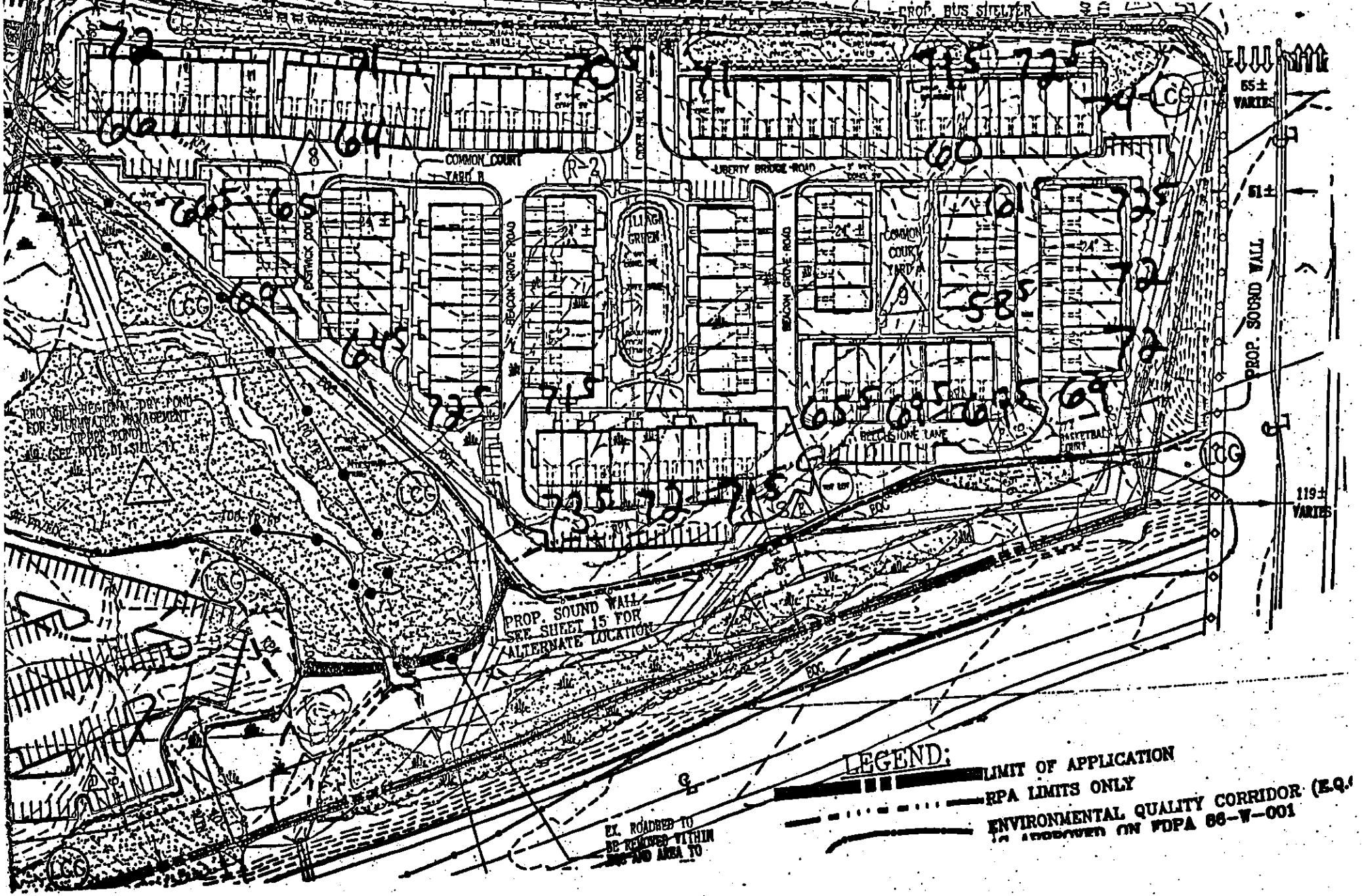
BRIDGE ROAD
5' WIDE CONC. SW
COMMON COURT YARD A
BEACON GROVE ROAD
BEECHSTONE LANE
BASKETBALL COURT
EQC
RPA
PROP. SOUND WALL SEE SHEET 15 FOR ALTERNATE
446
450
454
458
462
460
LEGEND:
LIMIT OF APP
RPA LIMITS
ENVIRON
AS AP
COM
EX. ROADBED TO BE REMOVED WITHIN EQC AND AREA TO BE REVEGETATED. SEE PROFFERS
SPACES



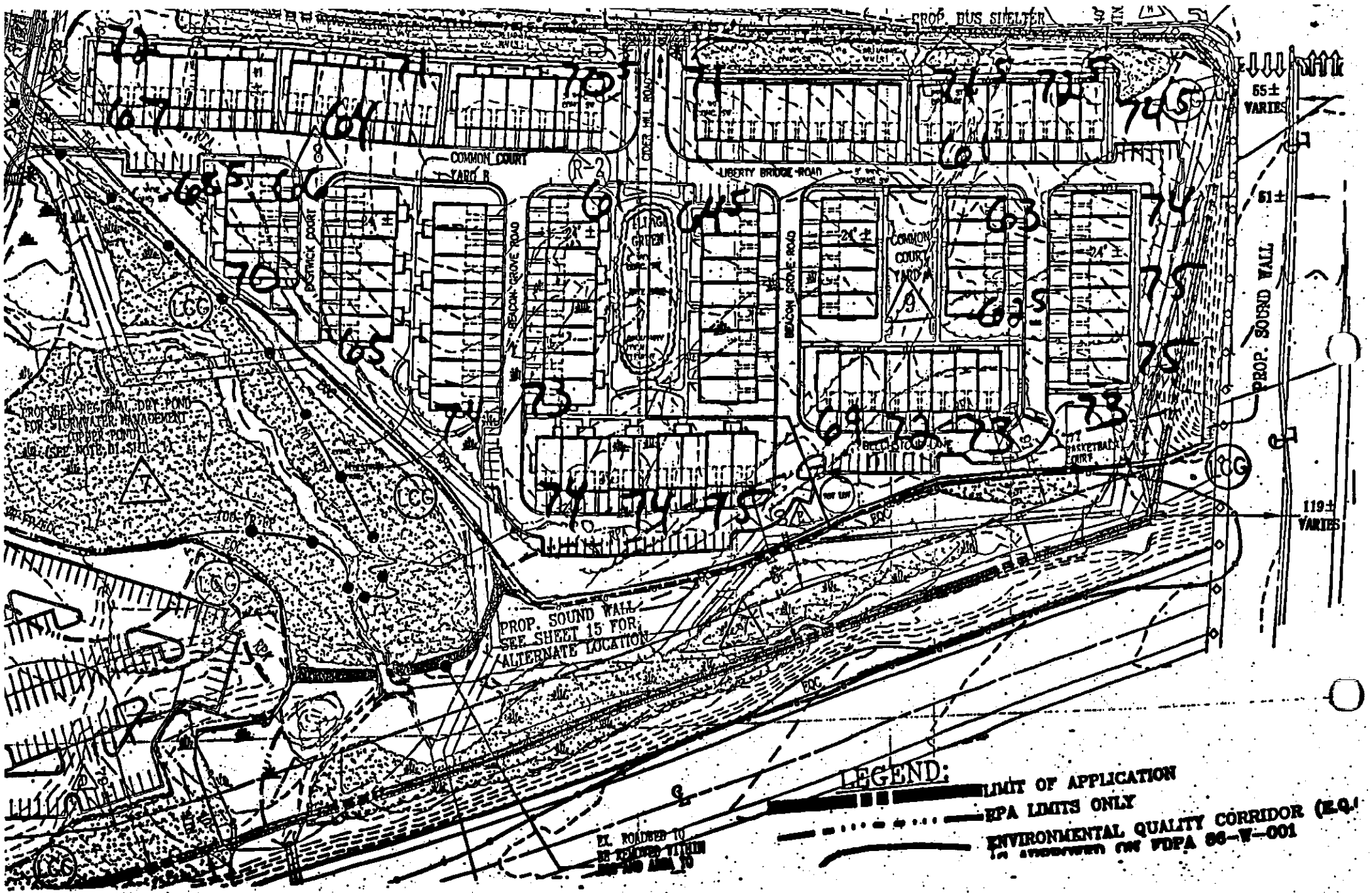
Mitigated DNL @ 1st FL



Mitigated DNL @ 2nd FL



Mitigated DNL @ 3rd FL



Mitigated DNL @ 4th FL

wyle laboratories

December 23, 2003

J/N 48703

Mr. Jeff Saxe
The Peterson Companies
12500 Fair Lakes Circle
Fairfax, Virginia 22033

Reference: East Market at Fair Lakes Outdoor Noise Analysis – West Ox Traffic

Dear Mr. Saxe:

This letter is an addendum to our November 10, 2003 outdoor noise level analysis and December 22, 2003 letter for the East Market at Fair Lakes residential project located along I-66, West Ox Road, and Fair Lakes Parkway in Fairfax County, Virginia.

During our meeting with Noel Kaplan on October 9, 2003, and our conversation with Noel this week, he expressed concern that our assumptions for traffic volumes and speeds for West Ox Road are not correct.

Volumes

The traffic forecast provided by Fairfax County for West Ox Road was 40,000. Based on VDOT data we assumed that the peak-hour traffic volume would be 8.2% of the ADT volume. Using a peak-hour forecast is somewhat conservative for this road, since the noise model is intended to evaluate the "loudest-hour" for the entire area, not the "peak-hour" for each road. Since the I-66 traffic volumes will be so high during its peak-hour, the loudest-hour for I-66 will surely not be during the middle of rush hour. Therefore, the loudest-hour for this area likely won't be at the time of the peak-hour volume for West Ox Road.

Per our conversation with Noel this week, Fairfax County staff also believes the peak-hour volume might be closer to 7% of the ADT.

Speeds

A traffic signal was incorporated into the noise model at the intersection of West Ox Road and Fair Lakes Parkway. The signals tell the model to accelerate traffic away from the signal; however, the model does not slow traffic leading up to the signal. The entire site frontage along West Ox Road is near the traffic signal. Also, traffic tends to back up at the light. For these reasons, it is appropriate consider deceleration when selecting an average speed for West Ox Road.

Wyle Laboratories, Inc. 2001 Jefferson Davis Highway, Suite 701, Arlington, VA 22202-3604 Tel: 703/418-4550, Telecopy: 703/418-4555

During our site visit we observed that traffic was traveling quite slowly on West Ox Road (estimated at 0-25 mph). Based on the increase in traffic volume indicated by the traffic forecast, traffic speeds will likely drop in the future. We assumed that the average traffic speed on West Ox Road would be 20 mph in the future.

Noise Wall

We evaluated two new scenarios using TNM. First, we considered the effect of using 30 mph for West Ox Road in lieu of 20 mph. Second, we considered the effect of using 40 mph for West Ox Road, combined with a 7% loudest-hour volume in lieu of 8.2%. Depending upon where on the site noise was evaluated, the increase in noise level varied from 0.4 to 0.9 dB for the second scenario. For the first scenario the increase was even less.

The resulting noise barrier designs required to meet the Fairfax County noise goals are shown in the attached figures. Figure 1 shows the noise barrier design from our December 22, 2003, letter. Figure 2 shows the noise barrier design using 30 mph; the elevation of the last wall segment increased from 452 to 458 feet. Figure 3 shows the noise barrier design using 40 mph and 7% of ADT; the height of the last three segments increased from 452-460 feet to 462 feet and an additional 50-foot long segment was added with a top elevation of 454 feet.

If you have any questions please call me at (703) 415-4550 extension 18.

Sincerely,

Gary E. Ehrlich, P.E.
Senior Acoustical Engineer

wyle laboratories

8	WORSHAM	POOR.	POOR	GOOD	SLIGHT	Y
10	GLENVILLE	FAIR	MARGINAL	GOOD	MODERATE	Y
55	GLENELG	GOOD	GOOD	GOOD	SEVERE	N

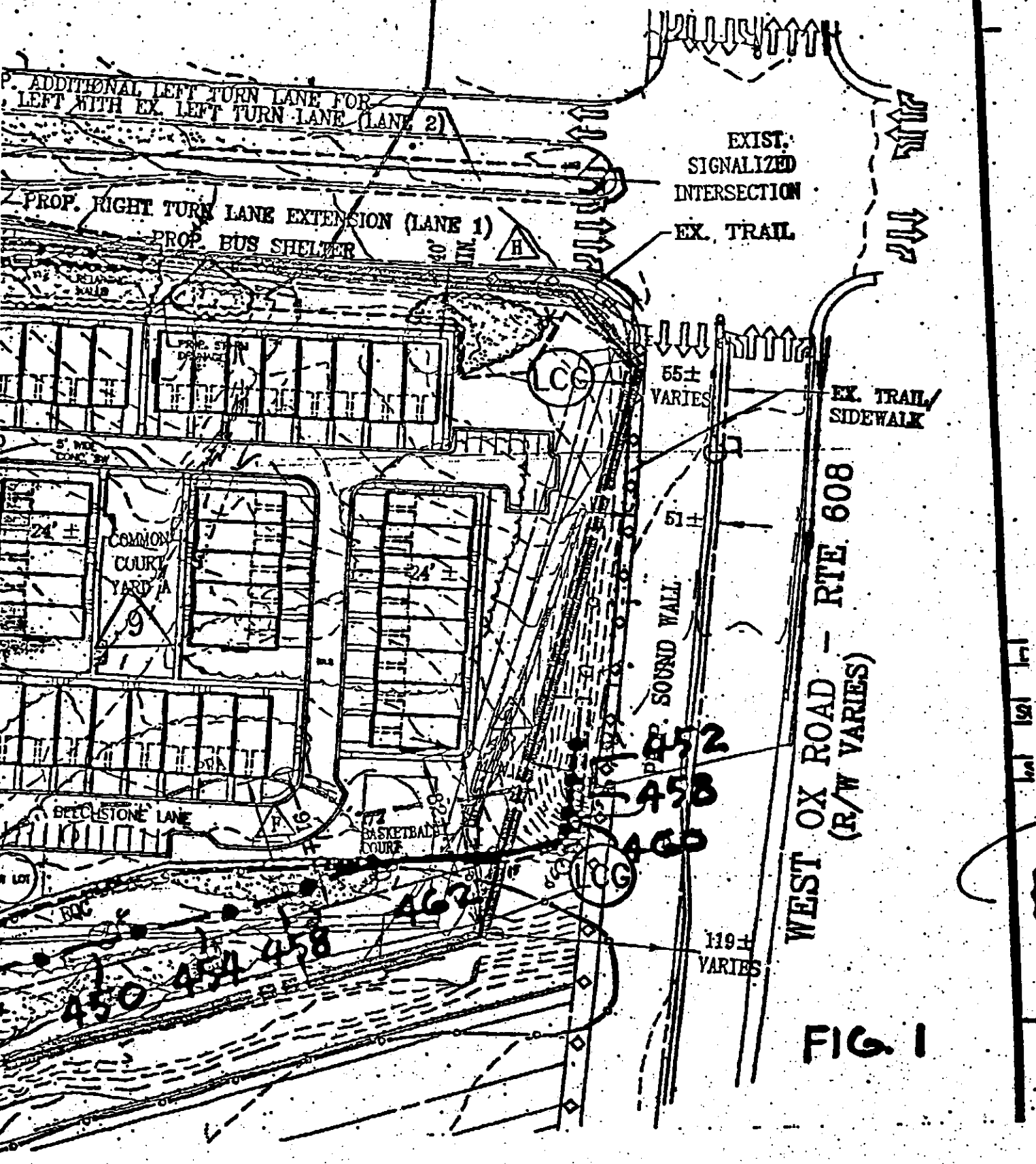


FIG. 1

10	GLENVILLE	FAIR	MARGINAL	GOOD	MODERATE	Y
55	GLENELG	GOOD	GOOD	GOOD	SEVERE	N

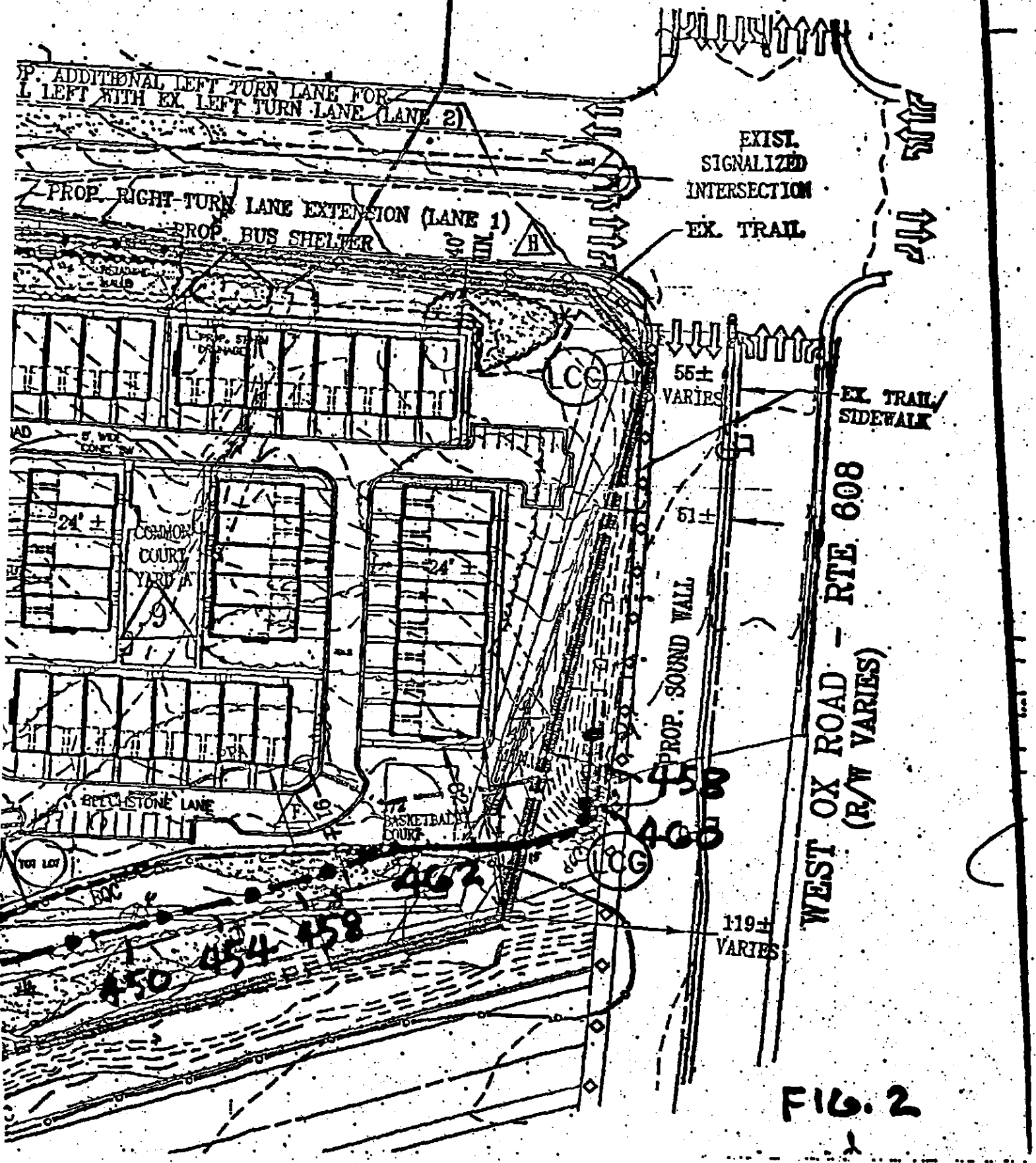


FIG. 2

8	WORSHAM	POOR.	POOR	GOOD	SLIGHT	Y
10	GLENVILLE	FAIR	MARGINAL	GOOD	MODERATE	Y
55	GLENELG	GOOD	GOOD	GOOD	SEVERE	N

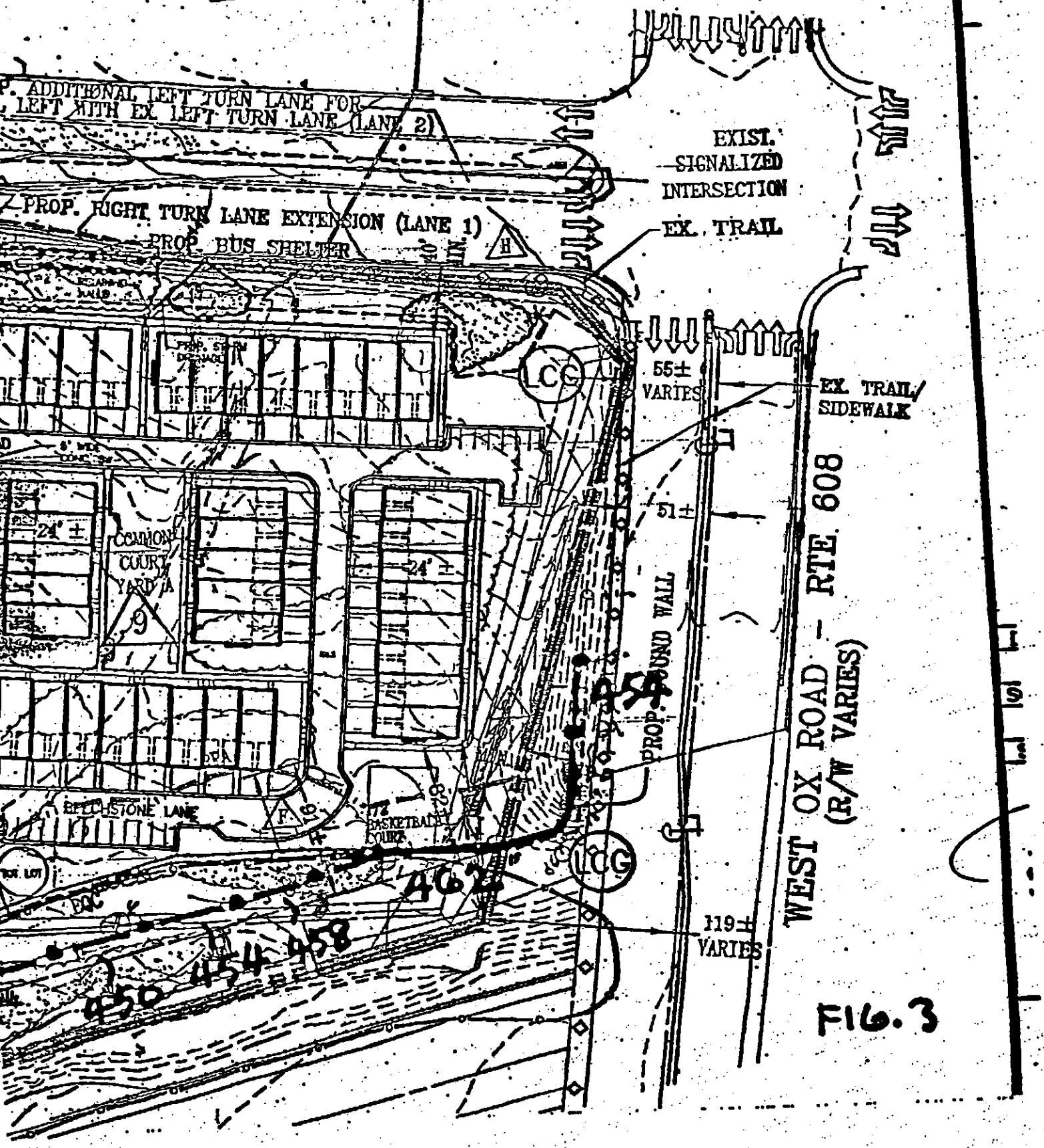


FIG. 3

EAST MARKET AT FAIR LAKES

PCA/CDPA/FDPA

REVISING FOR PART OF PARCEL 14B1 :
PCA 82-P-000-06
FDPA 82-P-000-14-02
FDPA 82-P-000-03-01

NOTE : ALL OF THESE DOCUMENTS ARE HEREAFTER REFERRED TO AS "FAIR LAKES APPLICATION".

REVISING FOR PART OF PARCEL 16 :
PCA 86-P-001-02
PCA 86-P-001-09
CDPA 86-P-001-03
FDPA 86-P-001-05-03-01

NOTE : ALL OF THESE DOCUMENTS ARE HEREAFTER REFERRED TO AS "GOVERNMENT CENTER APPLICATION".

REVISING FOR PART OF PARCEL 16 :
PCA 86-P-000-05
FDPA 86-P-000-02

NOTES:

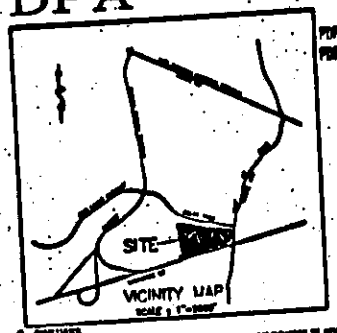
GENERAL NOTES

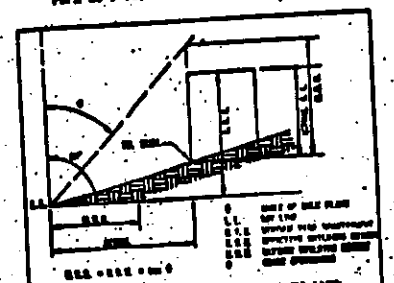
TRANSPORTATION AND PARKING

UTILITIES

STORMWATER MANAGEMENT (SVM), FLOODPLAINS AND RGC

PROPOSED USES, PLAN FEATURES AND DESIGN FLEXIBILITY





DETAIL ANGLE OF BULK PLANE
(NOT TO SCALE)

SHEET LIST:

SHEET 1 : COVER SHEET
SHEET 2 : PCA/CDPA/FDPA
SHEET 3 : PCA/CDPA/FDPA
SHEET 4 : PCA/CDPA/FDPA
SHEET 5 : PCA/CDPA/FDPA
SHEET 6 : LANDSCAPE PLAN
SHEET 7 : LANDSCAPE PLAN
SHEET 8 : LANDSCAPE PLAN
SHEET 9 : LANDSCAPE DETAILS
SHEET 10: LANDSCAPE DETAILS
SHEET 11: LANDSCAPE DETAILS
SHEET 12: LANDSCAPE DETAILS
SHEET 13: LANDSCAPE DETAILS
SHEET 14: LANDSCAPE SECTIONS
SHEET 15: ALTERNATE LAYOUTS
SHEET 16: ARCH ELEVATIONS
SHEET 17: ARCH ELEVATIONS
SHEET 18: ARCH ELEVATIONS

HISTORICAL TABULATIONS

APPROVED OVERALL AREA TABULATION FOR GOVERNMENT CENTER (INCLUDING PARCEL 16)

APPROVED OVERALL AREA TABULATION FOR FAIR LAKES LANDMAY V-88 (INCLUDING THE PORTION OF PARCEL 14B1 INCLUDED IN THIS APPLICATION)

OVERALL DENSITY TABULATIONS (5)

BUILDING HEIGHTS

PARKING TABULATIONS

RESIDENTIAL TABULATIONS (5)

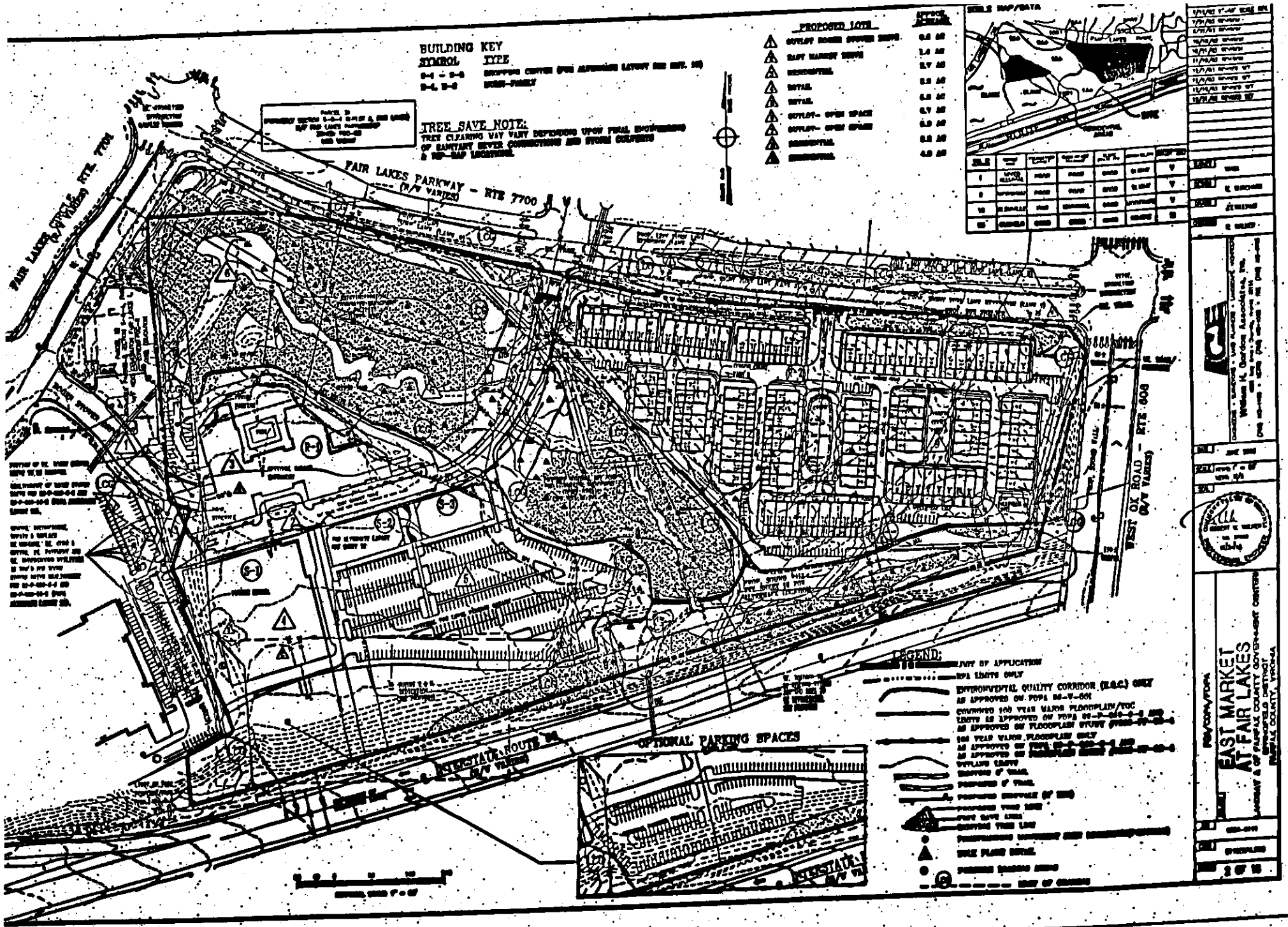
ADU CALCULATION

ACE

EAST MARKET AT FAIR LAKES
LANDMAY & FAIRFAX COUNTY GOVERNMENT CENTER
SPRINGFIELD DISTRICT
FAIRFAX COUNTY, VIRGINIA

COVER SHEET

1 OF 18


BUILDING KEY
SYMBOL TYPE
TREE SAVE NOTE:
TREE CLEARING MAY VARY DEPENDING UPON FINAL ENGINEERING OF SANITARY SEWER CONNECTIONS AND STORM CULVERTS & RIP-RAP LOCATIONS.
PROPOSED LOTS
FAIR LAKES PARKWAY - RTE 7700
(R/W VARIES)
FAIR LAKES CIRCLE RTE. 7701
(R/W VARIES)
WEST OX ROAD - RTE 608
(R/W VARIES)
INTERSTATE ROUTE 66
(R/W VARIES)
OPTIONAL PARKING SPACES
LEGEND:
LIMIT OF APPLICATION
RPA LIMITS ONLY
ENVIRONMENTAL QUALITY CORRIDOR (E.Q.C.) ONLY
EAST MARKET AT FAIR LAKES
FAIRFAX COUNTY GOVERNMENT CENTER
FAIRFAX COUNTY, VIRGINIA
2 OF 16

TREE SAVE NOTE:
TREE CLEARING MAY VARY DEPENDING UPON FINAL ENGINEERING OF SANITARY SEWER CONNECTIONS AND STORM DRAINS & BMP-BMP LOCATIONS.

PARCEL 3A
(FORMERLY SECTION 5-8-4 OUTLOT A, FAIR LAKES)
N/F FAIR LAKES PARTNERSHIP
ZONED: PDC-OS
USE: VACANT

FAIR LAKES PARKWAY-RTE. 7700 (R/W VARIES)

FAIR LAKES CIRCLE (R/W VARIES) RTE. 7701

MATCHLINE SHEET 4

MATCHLINE SHEET 5

LEGEND:

BUILDING KEY

SYMBOL	TYPE
5-1 - 5-5	[illegible]
5-6, 5-7	[illegible]

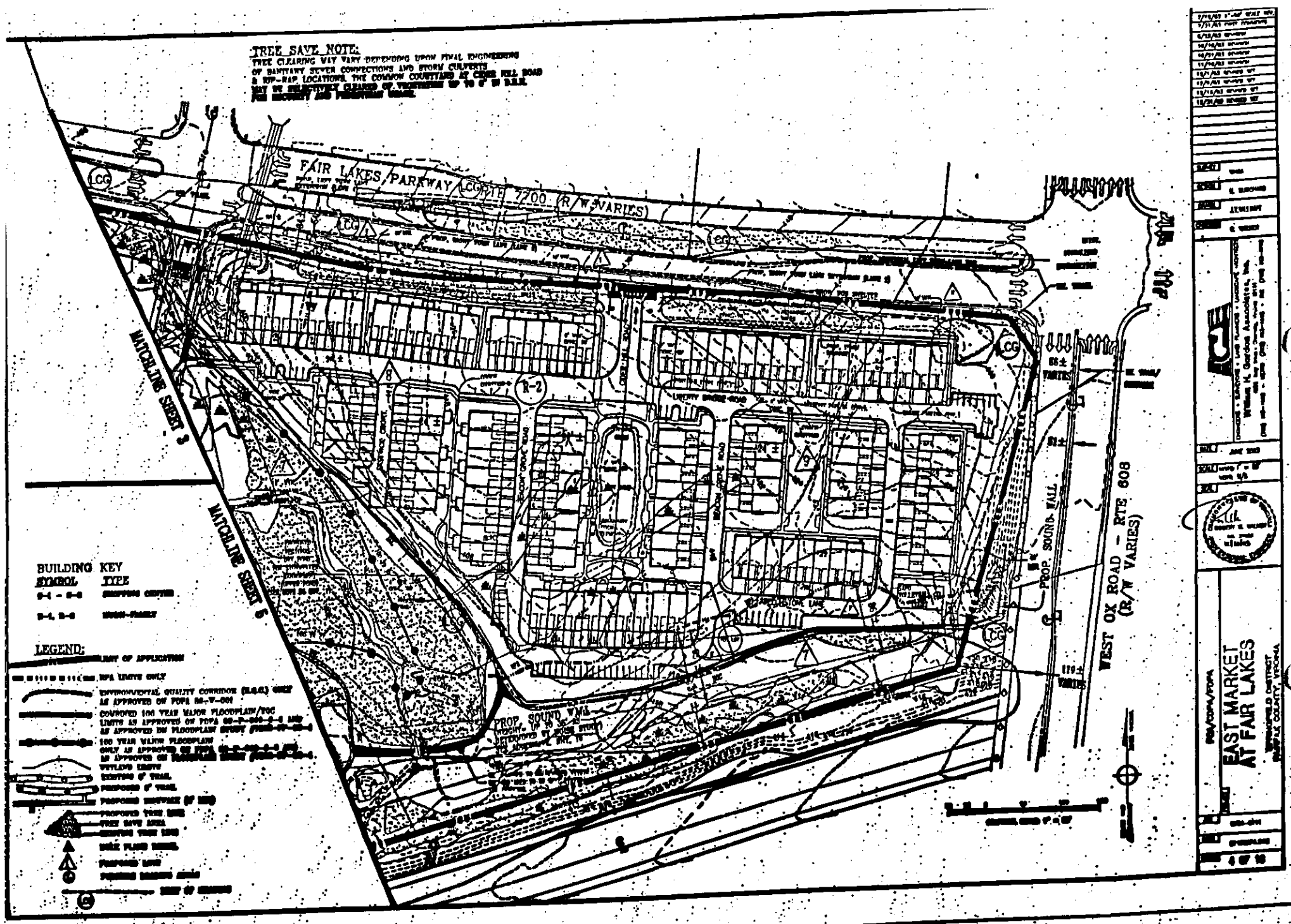
EAST MARKET AT FAIR LAKES

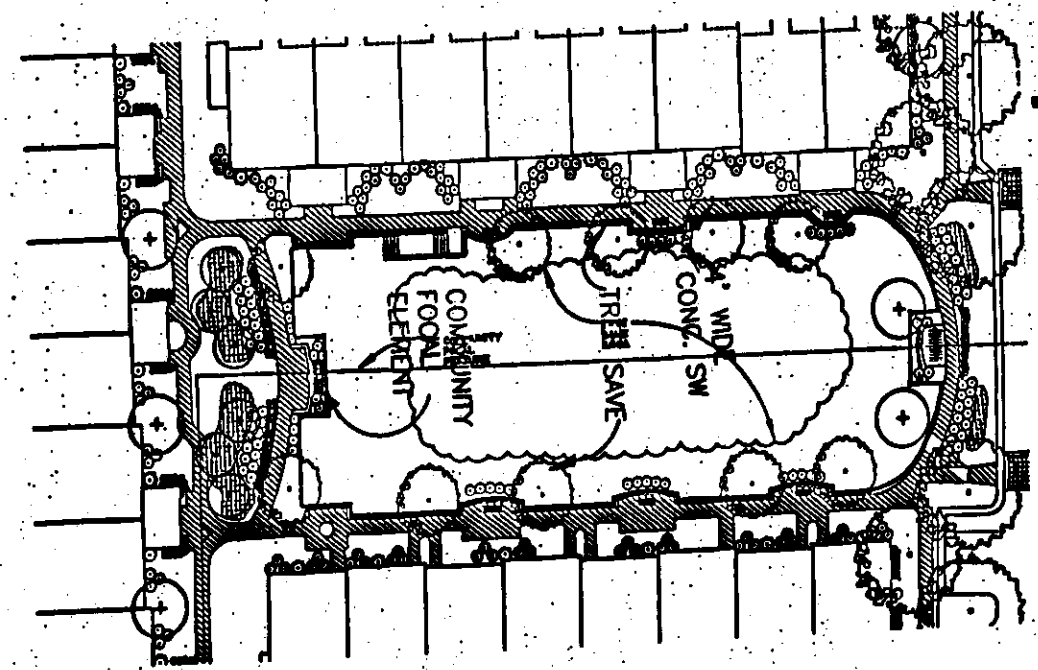
FAIRFAX COUNTY, VIRGINIA

SPRINGFIELD DISTRICT

FAIRFAX COUNTY, VIRGINIA

3 OF 10


TREE SAVE NOTE:
TREE CLEARING MAY VARY DEPENDING UPON FINAL ENGINEERING OF SANITARY SEWER CONNECTIONS AND STORM CULVERTS & RIP-RAP LOCATIONS. THE COMMON COURTYARD AT CEDAR HILL ROAD MAY BE SELECTIVELY CLEARED OF VEGETATION UP TO 6' IN D.B.H. FOR SECURITY AND PEDESTRIAN USAGE.
FAIR LAKES PARKWAY (LCG) RTE 7700 (R/W VARIES)
MATCHLINE SHEET 3
MATCHLINE SHEET 5
LCG
R-2
LIBERTY BRIDGE ROAD
PROP. SOUND WALL
WEST OX ROAD - RTE 608 (R/W VARIES)
BUILDING KEY
SYMBOL TYPE
LEGEND:
LIMIT OF APPLICATION
RPA LIMITS ONLY
ENVIRONMENTAL QUALITY CORRIDOR (E.Q.C.) ONLY AS APPROVED ON FDPA 88-V-001
COMBINED 100 YEAR MAJOR FLOODPLAIN/FQC LIMITS AS APPROVED ON FDPA
100 YEAR MAJOR FLOODPLAIN ONLY AS APPROVED ON FDPA
WETLAND LIMITS
EXISTING 6' TRAIL
PROPOSED 6' TRAIL
PROPOSED TREE LINE
TREE SAVE AREA
EXISTING TREE LINE
DUKE PLANE TRAIL
PROPOSED LINE
PROPOSED DRAINAGE AREAS
LIMIT OF DRAINAGE
EAST MARKET AT FAIR LAKES
FDA/CDPA/FDPA
SPRINGFIELD DISTRICT
FAIRFAX COUNTY, VIRGINIA
4 OF 10



LEGEND

- DECIDUOUS TREES
- COLUMNAR TREES
- FLOWERING TREES
- EVERGREEN TREES
- SHRUBS
- GROUNDCOVER/ORNAMENTAL GRASSES
- BOLLARDS SEE DWT.
- CONTAINER PLANTER SEE DWT.
- RETAIL PARKING LIGHTS SEE DWT.
- RESIDENTIAL STREET LIGHTS SEE DWT.
- TRASH RECEPTACLE SEE DWT.
- BENCHES
- ENTRANCE SIGN PEDESTAL (SEE DWT. LS-10)
- CONC. SIDEWALK

DETAIL PLAN (VILLAGE GREEN)

DETAIL PLAN

SCALE 1" = 10'

NOTE:

1. THIS LAYOUT IS PROVIDED TO INDICATE PLANT MASSINGS, PLANT QUANTITIES, BED SHAPES, AND SPECIES ARE SUBJECT TO CHANGE AT THE FINAL SITE PLAN.

2. THE IMAGES ON THIS SHEET DEMONSTRATE THE DESIGN INTENT/QUALITY OF THE PROPOSED LANDSCAPING. THE DEVELOPER RESERVES THE RIGHT TO CHANGE THE DESIGN, QUANTITIES, AND/OR LOCATION DUE TO FINAL SITE PLAN AND ENGINEERING REQUIREMENTS.

3. THE VILLAGE GREEN TREE SAVE AREA MAY INCLUDE SELECTIVE CLEARING OF TREES AND SHRUBS UP TO 6' D.B.H. FOR SECURITY AND PEDESTRIAN USE.

BC Consultants

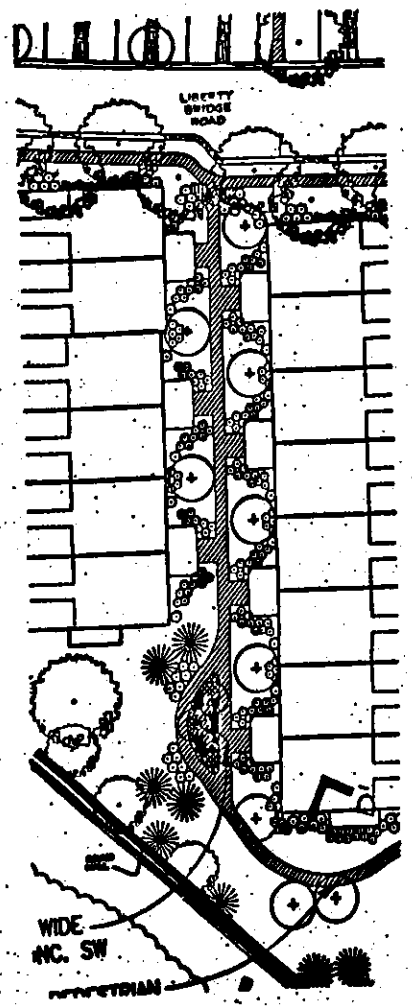
William H. Gordon Associates, Inc.

LANDSCAPE DETAILS

EAST MARKET AT FAIR LAKES

SPRINGFIELD DISTRICT
FAIRFAX COUNTY, VIRGINIA

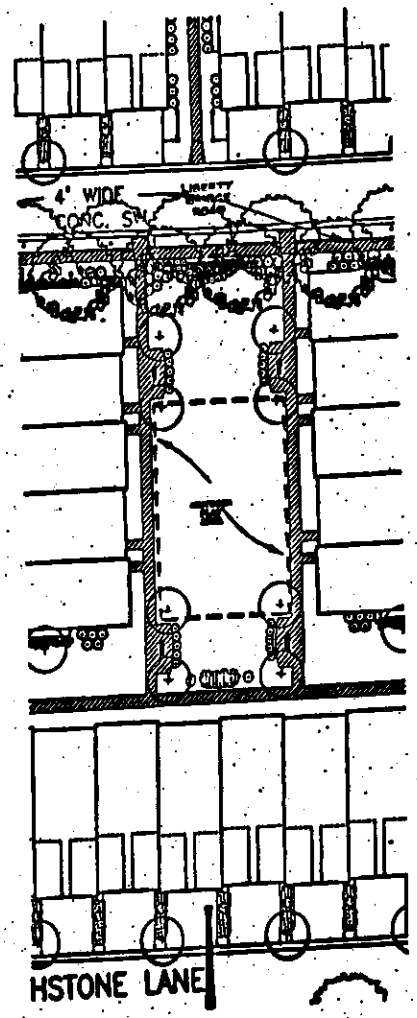
9 OF 10



COURTYARD A

DETAIL PLAN

SCALE 1"= 10'



COURTYARD B

DETAIL PLAN

SCALE 1"= 10'

LEGEND

- DECIDUOUS TREES
- COLUMNAR TREES
- FLOWERING TREES
- EVERGREEN TREES
- SHRUBS
- GROUNDCOVER/SEASONAL COLORS
- BOLLARDS SEE SHT. 4
- CONTAINER PLANTER SEE SHT. 7
- RETAIL PARKING LIGHTS SEE SHT. 3
- RESIDENTIAL STREET LIGHTS SEE SHT. 2
- TRASH RECEPTACLE SEE SHT. 5
- BENCHES 4
- ENTRANCE SIGN MONUMENT (SEE SHT. LS-10)
- CONC. SIDEWALK

NOTE:

1. THIS LAYOUT IS PROVIDED TO INDICATE PLANT MASSINGS, PLANT QUANTITIES, BED SHAPES, AND SPECIES ARE SUBJECT TO CHANGE AT THE FINAL SITE PLAN.

2. THE IMAGES ON THIS SHEET DEMONSTRATE THE DESIGN INTENT/QUALITY OF THE PROPOSED LANDSCAPING. THE DEVELOPER RESERVES THE RIGHT TO CHANGE THE DESIGN, QUANTITIES, AND/OR LOCATION DUE TO FINAL SITE PLAN AND ENGINEERING REQUIREMENTS.

3. OUTDOOR PLAY AREA MAY INCLUDE BUT NOT LIMITED TO CRICKET, BOCCE, BASEMENTS, OR OTHER SIMILAR ACTIVITIES.

BC Consultants

ACME

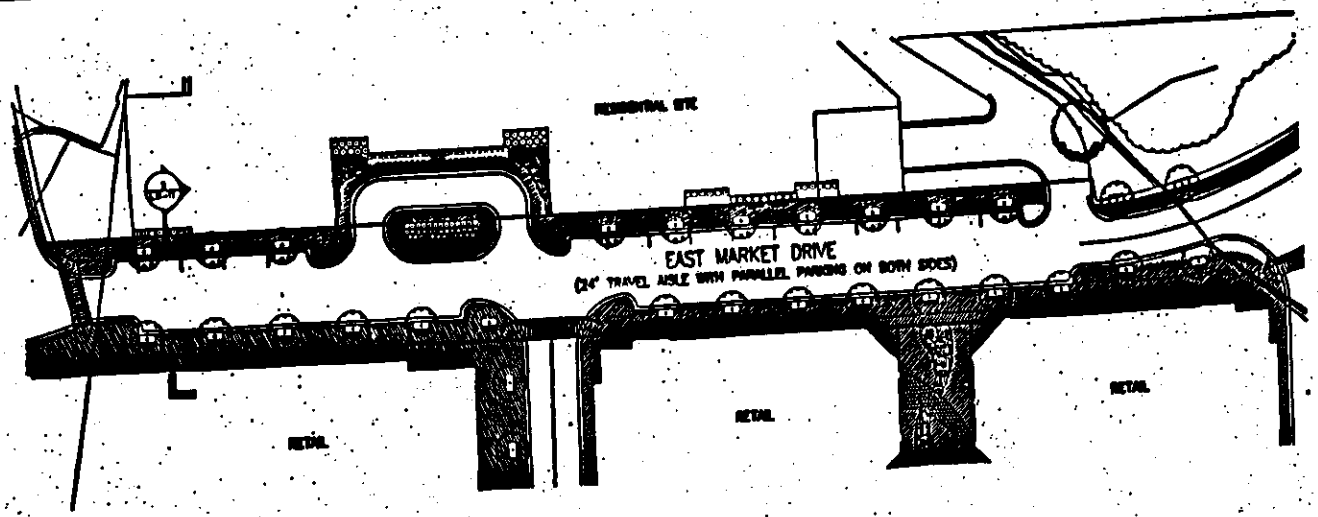
William H. Gordon Associates, Inc.

LANDSCAPE DETAILS

EAST MARKET AT FAIR LAKES

SPRINGFIELD DISTRICT
FAIRFAX COUNTY, VIRGINIA

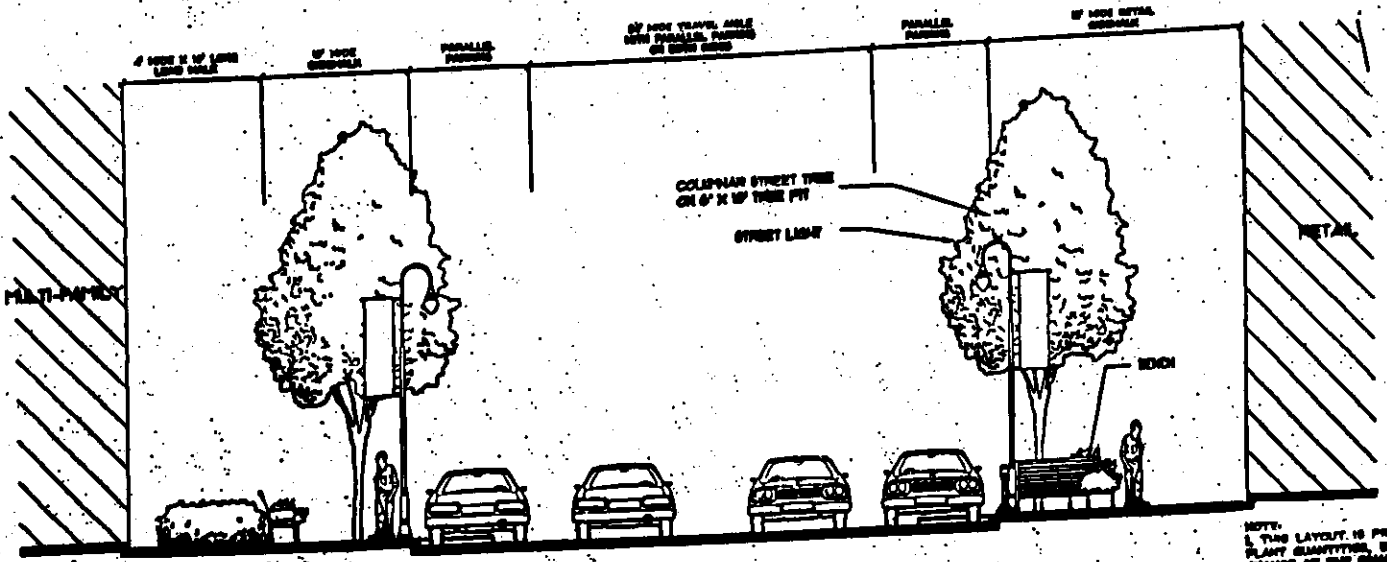
10 OF 16



RETAIL STREETSCAPE/MULTI-FAMILY STREETSCAPE

DETAIL PLAN

SCALE 1" = 50'



RETAIL STREETSCAPE SECTION

SECTION

SCALE 1" = 4'

LEGEND

- DECIDUOUS TREES
- COLUMNAR TREES
- FLOWERING TREES
- EVERGREEN TREES
- SHRUBS
- GROUNDCOVER/SEASONAL COLORS
- BOLLARDS SEE DWT.
- CONTAINER PLANTER SEE DWT.
- RETAIL PARKING LIGHTS SEE DWT.
- RESIDENTIAL STREET LIGHTS SEE DWT.
- TRASH RECEPTACLE SEE DWT.
- BENCHES
- CONC. SIDEWALK

NOTE:
1. THIS LAYOUT IS PROVIDED TO INDICATE PLANT MASSINGS. PLANT QUANTITIES, BED SHAPES, AND SPECIES ARE SUBJECT TO CHANGE AT THE FINAL SITE PLAN.

2. THE IMAGES ON THIS SHEET DEMONSTRATE THE DESIGN INTENT/QUALITY OF THE PROPOSED LANDSCAPING. THE DEVELOPER RESERVES THE RIGHT TO CHANGE THE DESIGN, QUANTITIES, AND/OR LOCATIONS DUE TO FINAL SITE PLAN AND ENGINEERING REQUIREMENTS.

BC Consultants

Planners • Engineers • Surveyors • Landscape Architects
3955 Pender Lake Circle, Suite 110, Fairfax, VA 22033
(703)591-6110 (Fax)
www.bcconsultants.com

LANDSCAPE DETAILS

EAST MARKET AT FAIR LAKES

SPRINGFIELD DISTRICT
FAIRFAX COUNTY, VIRGINIA

JOB 6701-011

DATE 01/13/03

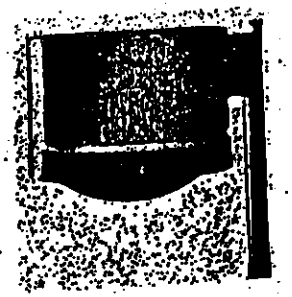
SHEET 11 OF 15

REVISIONS
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20.

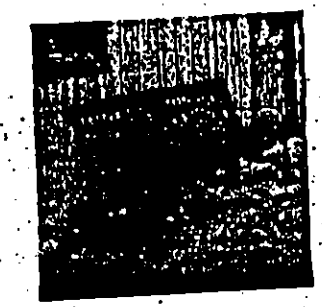
William H. Gordon Associates, Inc.
Consulting • Engineers • Land Surveyors • Landscape Architects
JUNE 2003
SCALE HORZ. 1" = 10' VERT. N/A

STREET RETAIL LIGHT OR EQUAL

PEDESTRIAN LIGHT OR EQUAL



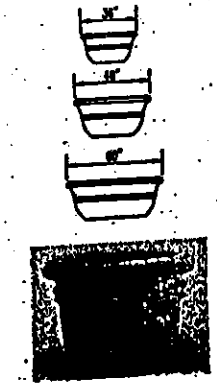
PARKING LIGHT OR EQUAL



BENCH OR EQUAL

RECEPTACLE OR EQUAL

BOLLARD LIGHT OR EQUAL



PLANTER OR EQUAL

NOTE:
1. THIS LAYOUT IS PROVIDED TO INDICATE PLANT NAMES, PLANT QUANTITIES, SIZE SHAPES, AND SPACES ARE SUBJECT TO CHANGE AT THE FINAL SITE PLAN.

2. THE IMAGES ON THIS SHEET DEMONSTRATE THE DESIGN INTENT/QUALITY OF THE PROPOSED LANDSCAPING. THE DEVELOPER RESERVES THE RIGHT TO CHANGE THE DESIGN, QUANTITIES, AND/OR LOCATIONS DUE TO FINAL SITE PLAN AND ENGINEERING REQUIREMENTS.

BC Consultants

LANDSCAPE DETAILS

EAST MARKET AT FAIR LAKES

FAIRFAX COUNTY, VIRGINIA

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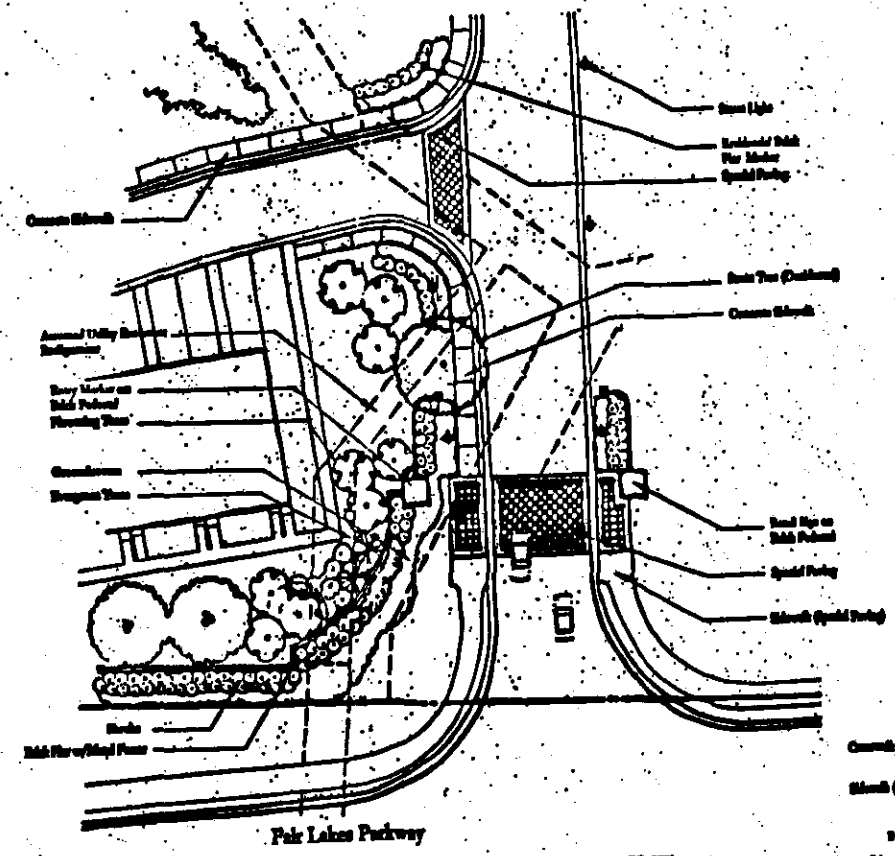
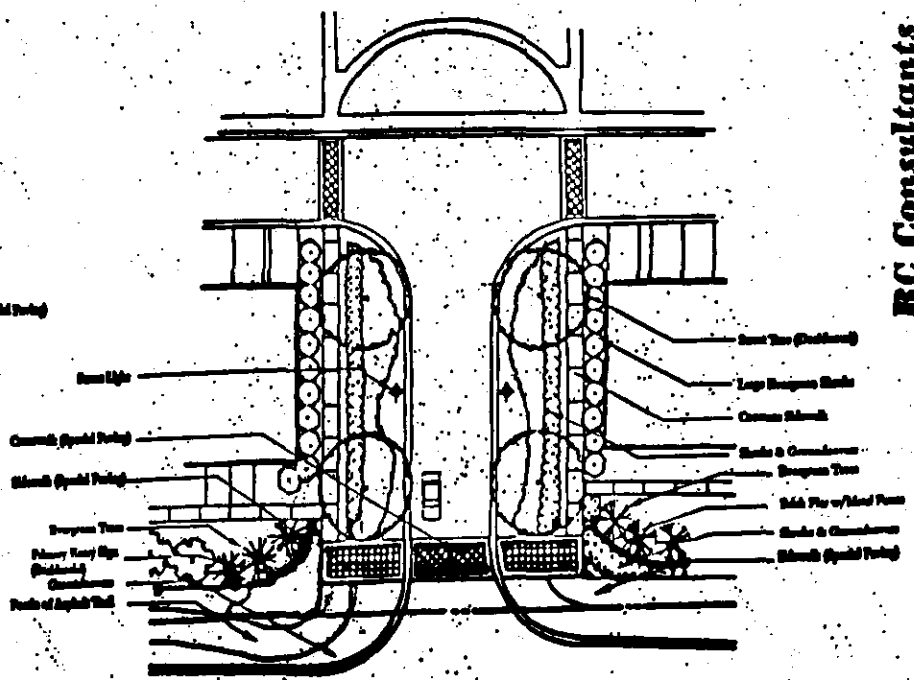


2
L5-15

DETAILED PLAN ENTRY MONUMENT



2
L5-15

DETAILED PLAN SECONDARY ENTRANCE (RESIDENTIAL)

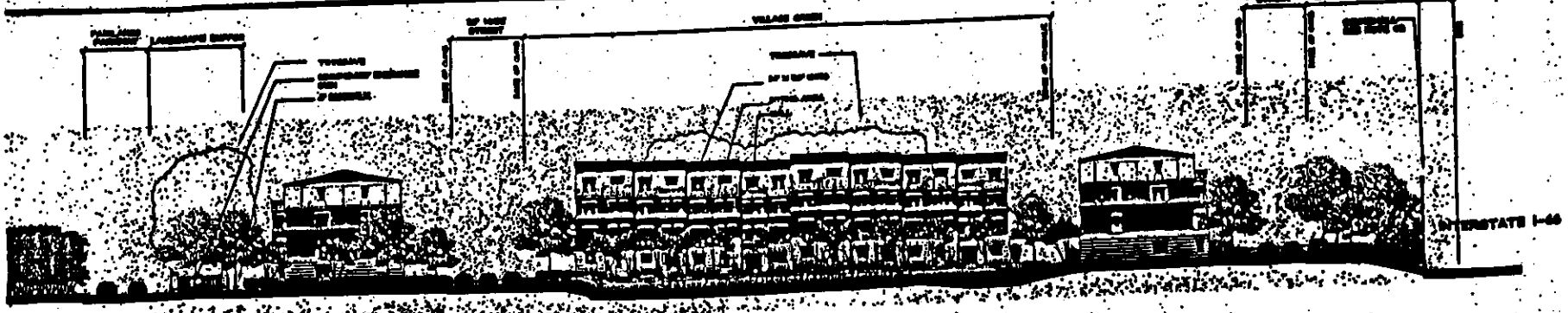
BC Consultants

LANDSCAPE PLAN

EAST MARKET AT FAIR LAKES

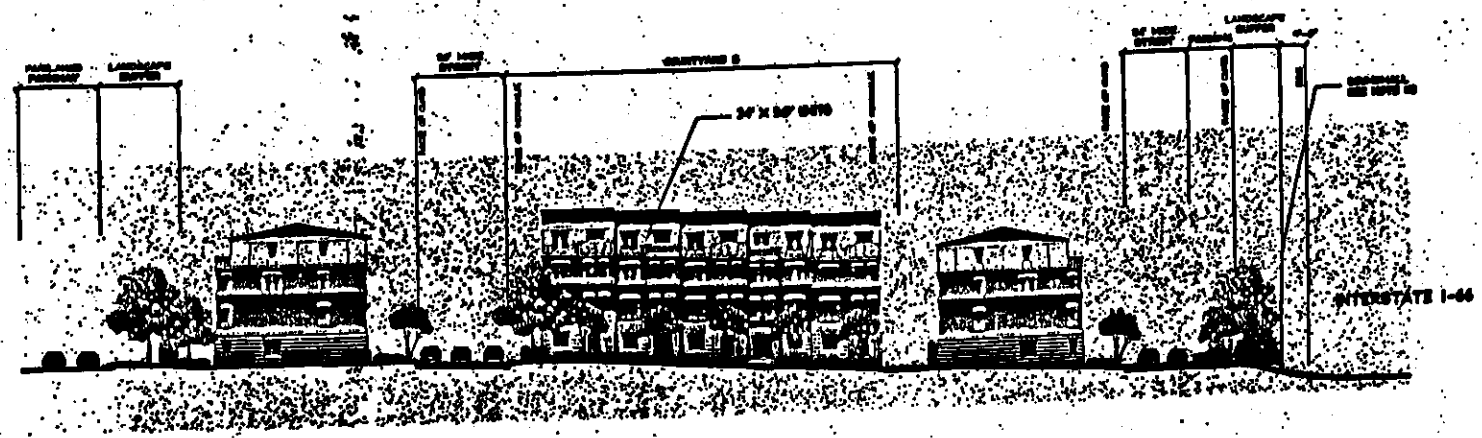
STONEFIELD DISTRICT
FAIRFAX COUNTY, VIRGINIA

13 OF 17



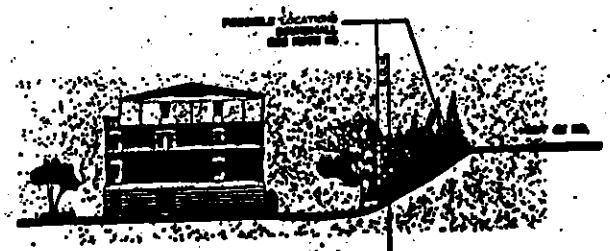
SECTION A'-A'

SECTION SCALE 1"= 20'



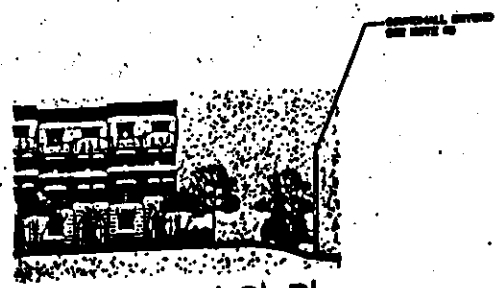
SECTION B'-B'

SECTION SCALE 1"= 20'



SECTION C'-C'

SECTION SCALE 1"= 20'



SECTION D'-D'

SECTION SCALE 1"= 20'

NOTE:
1. THIS LAYOUT IS PROVIDED TO INDICATE PLANT MASSINGS. PLANT QUANTITIES, BED SHAPES, AND SPECIES ARE SUBJECT TO CHANGE AT THE FINAL SITE PLAN.

2. THE IMAGES ON THIS SHEET DEMONSTRATE THE DESIGN INTENT/QUALITY OF THE PROPOSED LANDSCAPING. THE DEVELOPER RESERVES THE RIGHT TO CHANGE THE DESIGN, QUANTITIES, AND/OR LOCATION DUE TO FINAL SITE PLAN AND ENGINEERING REQUIREMENTS.

3. SOUND WALL HEIGHTS ARE APPROXIMATE AND ACTUAL HEIGHTS WILL BE DETERMINED BY THE FINAL NOISE ANALYSIS

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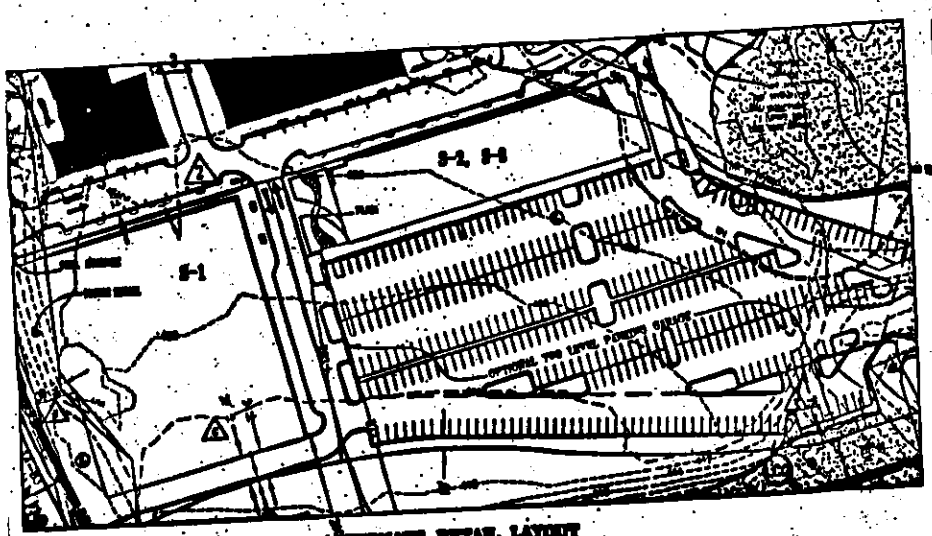
LANDSCAPE SECTIONS

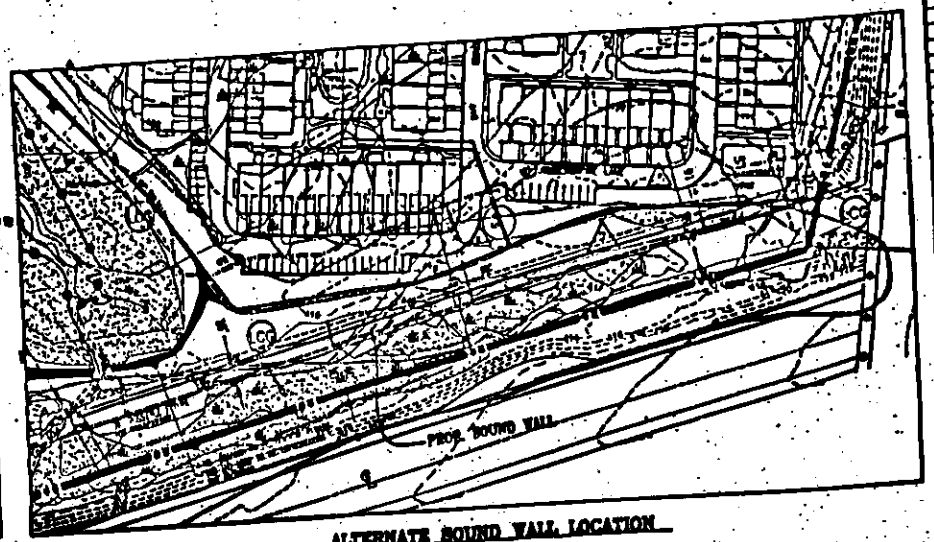
EAST MARKET AT FAIR LAKES

SPRINGFIELD DISTRICT
FAIRFAX COUNTY, VIRGINIA

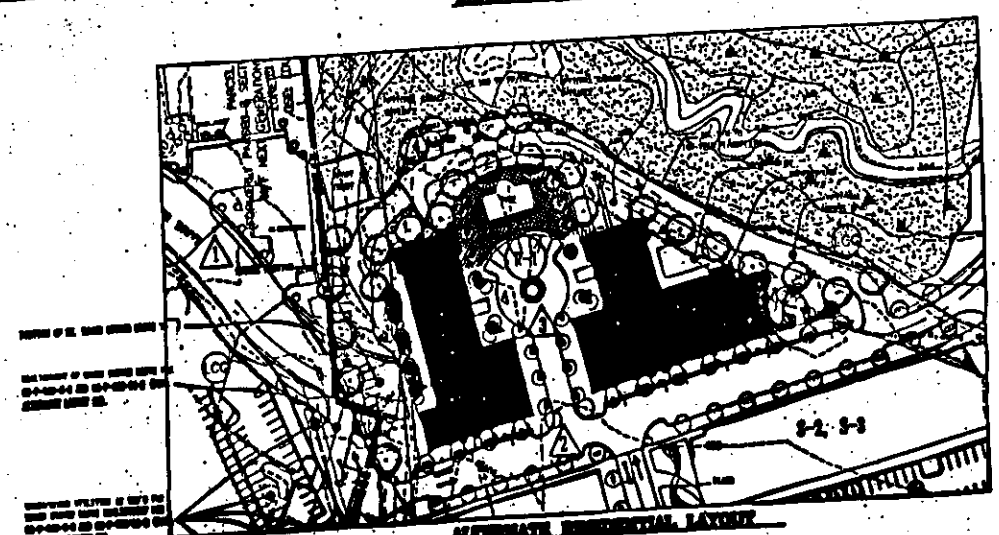
14 OF 18



ALTERNATE RETAIL LAYOUT



ALTERNATE SOUND WALL LOCATION



ALTERNATE RESIDENTIAL LAYOUT

BUILDING KEY

SYMBOL	TYPE
S-1 - S-3	SHOPPING CENTER
R-1, R-2	MULTI-FAMILY

LEGEND:

LIMIT OF APPLICATION

SPA LIMITS ONLY

ENVIRONMENTAL QUALITY CORRIDOR (E.Q.C.) ONLY AS APPROVED ON FDPA 88-V-001

COMBINED 100 YEAR MAJOR FLOODPLAIN/VOC LIMITS AS APPROVED ON FDPA 88-P-[illegible] AND AS APPROVED ON FLOODPLAIN STUDY [illegible]

100 YEAR MAJOR FLOODPLAIN ONLY AS APPROVED ON FDPA [illegible] AS APPROVED ON FLOODPLAIN STUDY [illegible]

WETLAND LIMITS

EXISTING 8' TRAIL

PROPOSED 8' TRAIL

PROPOSED SIDEWALK (8' MIN)

PROPOSED TREE LINE

TREE SAVE AREA

EXISTING TREE LINE

BULK PLANE RETAIL

PROPOSED LOTS

POSSIBLE LOADING AREAS

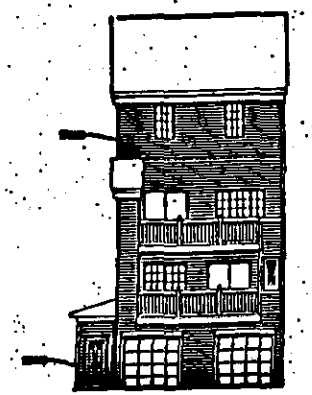
LIMIT OF GRADING

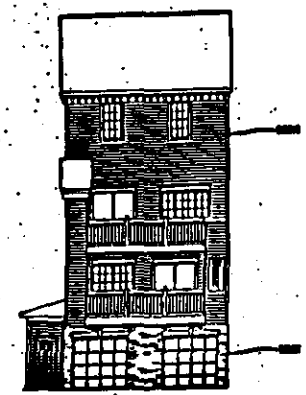
ALTERNATE LAYOUTS

EAST MARKET AT FAIR LAKES

SPRINGFIELD DISTRICT
FAIRFAX COUNTY, VIRGINIA

16 OF 16

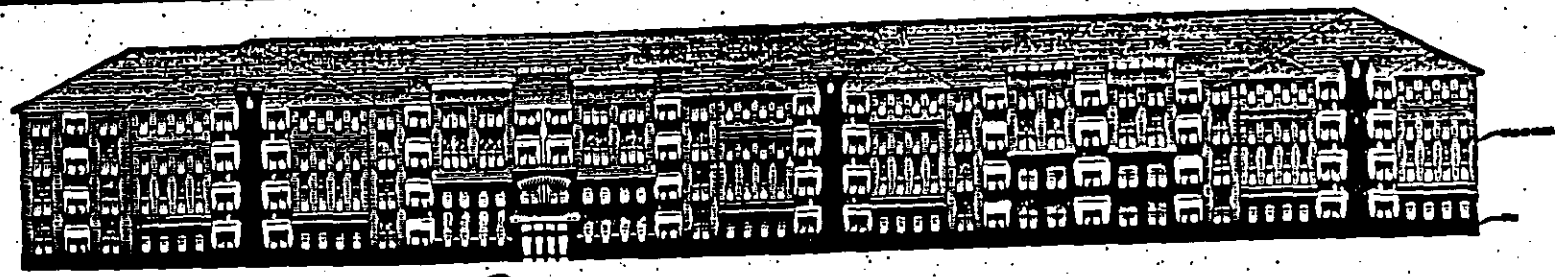




ARCHITECTURAL ELEVATIONS

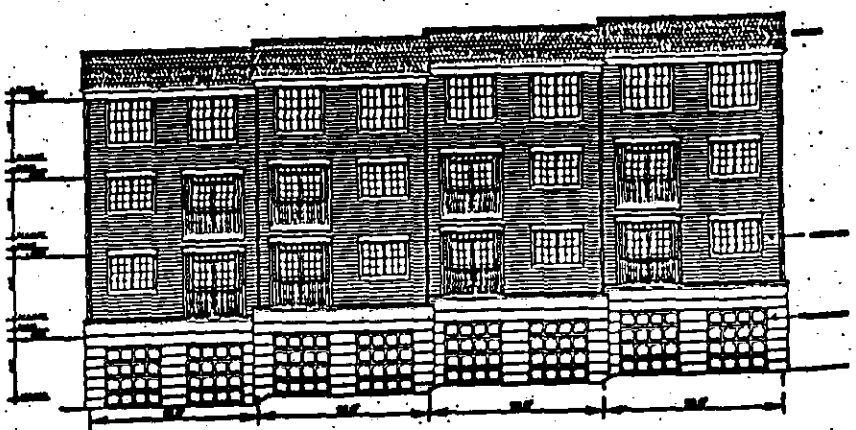
EAST MARKET AT FAIR LAKES

FAIRFIELD DISTRICT
FAIRFAX COUNTY, VIRGINIA

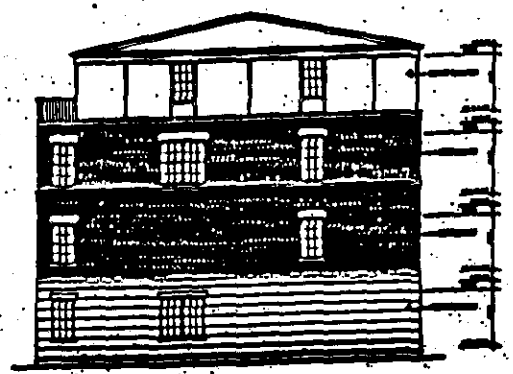


R-1 RESIDENTIAL – MULTI-FAMILY FLATS

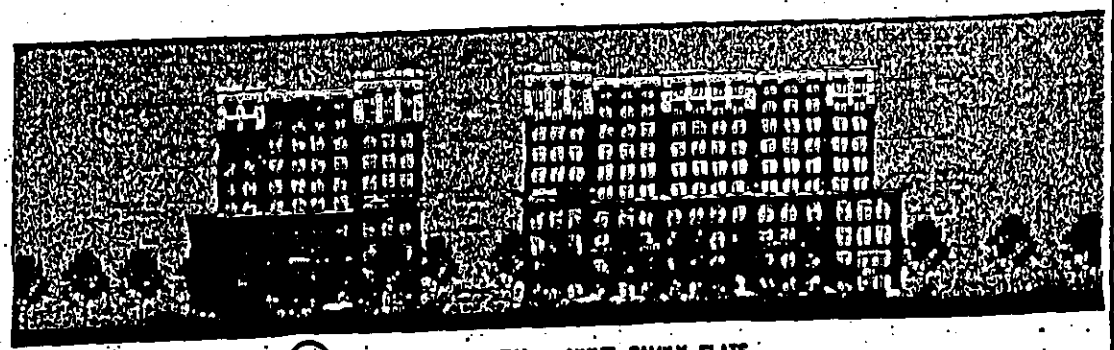
R-2



R-2



R-2



R-1 OPTIONAL RESIDENTIAL – MULTI-FAMILY FLATS

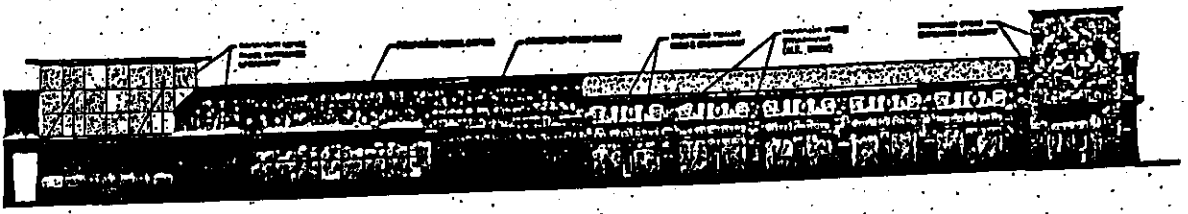
THE ARCHITECTURAL ELEVATIONS LABELED R-2 DESIGNED BY MARSHAL SANTINI DEPICTS THE GENERAL CHARACTER, DESIGN AND MATERIALS OF THE UNITS IN BOTTOM PORTION OF LANDBAY R-2 AND THE ELEVATION LABELED R-1 DEPICTS THE GENERAL CHARACTER, DESIGN AND MATERIALS OF THE R-1 BUILDING.

ARCHITECTURAL ELEVATIONS

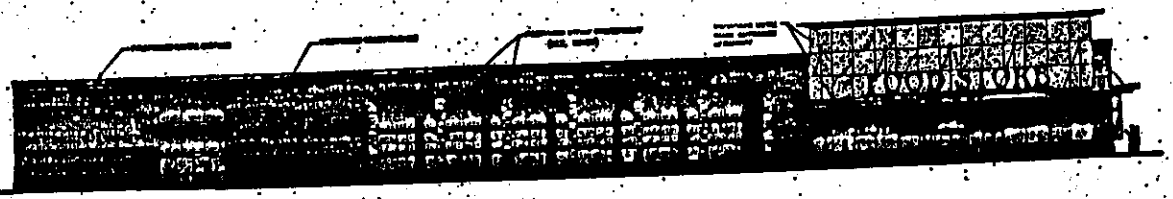
EAST MARKET AT FAIR LAKES

SPRINGFIELD DISTRICT
FAIRFAX COUNTY, VIRGINIA

27 OF 10



③ Road Store Elevation

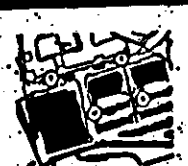


④ Road Store Elevation

THESE ARCHITECTURAL ELEVATIONS DESIGNED BY WVAA DEPICTS THE GENERAL CHARACTER OF THE DESIGN OF BUILDINGS B-1 THRU B-3. THE DESIGN MAY BE ALTERED DUE TO MARKET OR ARCHITECTURAL REQUIREMENTS.

① Retail Elevation

② Retail Elevation



East Market At Fair Lakes

East Market Road Fairfax, Virginia

The Patterson Companies

ARCHITECTURAL ELEVATIONS

EAST MARKET AT FAIR LAKES

SPRINGFIELD DISTRICT
FAIRFAX COUNTY, VIRGINIA

16 OF 18

4036955

S USER GENERATED REPORTS
ZONING APPLICATION SUMMARY REPORT
APPLICATION NUMBER: PCA 86-W-001-10

ON DATE: 1/26/2004 HEARING BODY: BOS

NO MAGISTERIAL DISTRICT: SPRINGFIELD

LICANT NAME THE PETERSON COMPANIES L.C.

FF COORDINATOR: WMAYLA ACTION: APPROVE

ISION SUMMARY:

ON JANUARY 26, 2004, SUPERVISOR MCCONNELL MOVED TO APPROVE PCA 86-W-001-10 SUBJECT TO THE PROFFERS DATED JANUARY 23, 2004. THE MOTION PASSED WITHOUT OBJECTION.

ZONING INFORMATION

EXISTING ZONING

STRICT	AREA
IC	30.79 ACRES
OTAL	30.79 ACRES

APPROVED AREA

DISTRICT	AREA
PDC	30.79 ACRES
TOTAL	30.79 ACRES

TAX MAP NUMBERS

2- /01/ /0015-

APPROVED ZONING DISTRICT DATA

ONING DISTRICT: PDC

APROVED RESIDENTIAL DEVELOPMENT

AND USE	DWELLING UNITS	LAND AREA	UNIT OF MEASURE	NO. OF ADDR
RETAIL/EST				
OTAL				

APROVED NON-RESIDENTIAL DEVELOPMENT

FLOOR AREA	UNIT OF MEASURE	LAND AREA	UNIT OF MEASURE	FAR
120,000.00	SQ FEET	34.08	ACRES	0.08
120,000.00	SQ FEET	34.08	ACRES	0.48

PROFFER INFORMATION

OFFER STATEMENT DATE: 01-23-2004

EM	DUE DATE	TRIGGER NO.	TRIGGER EVENT	CONTRIB AMT	EXPIRATION DATE
GNAGE	01-01-0001	0	N/A	$0	01-01-0001
OFFERED PLANS	01-01-0001	0	N/A	$0	01-01-0001
RN LANE(S)	01-01-0001	0	N/A	$0	01-01-0001
ORMWATER MANAGEMENT POND - OI	01-01-0001	0	N/A	$0	01-01-0001
DEWALK/TRAIL	01-01-0001	0	N/A	$0	01-01-0001
GHT OF WAY - DEDICATION	01-01-0001	0	N/A	$0	01-01-0001
ATER	01-01-0001	0	N/A	$0	01-01-0001
E RESTRICTIONS	01-01-0001	0	N/A	$0	01-01-0001
AVE FENCING	01-01-0001	0	N/A	$0	01-01-0001
EE PRESERVATION/SURVEY	01-01-0001	0	N/A	$0	01-01-0001
FFORDABLE DWELLING UNITS	01-01-0001	0	N/A	$0	01-01-0001
RCHEOLOGY	01-01-0001	0	N/A	$0	01-01-0001
RCHITECTURE	01-01-0001	0	N/A	$0	01-01-0001

ROFFER INFORMATION

R STATEMENT DATE: 01-23-2004

	DUE DATE	TRIGGER NO.	TRIGGER EVENT	CONTRIB AMT	EXPIRATION DATE
E PARKING	01-01-0001	0	N/A	$0	01-01-0001
ELTER/MAINTENANCE	01-01-0001	0	N/A	$0	01-01-0001
IBUTION - FCPA	01-01-0001	0	N/A	$0	01-01-0001
IBUTION - RECREATION	01-01-0001	0	N/A	$0	01-01-0001
IBUTION - SCHOOL	01-01-0001	0	N/A	$0	01-01-0001
NAYS	01-01-0001	0	N/A	$0	01-01-0001
IENT	01-01-0001	0	N/A	$0	01-01-0001
SY EFFICIENCY	01-01-0001	0	N/A	$0	01-01-0001
ONMENTAL QUALITY CORRIDOR (I	01-01-0001	0	N/A	$0	01-01-0001
TAGE IMPROVEMENTS	01-01-0001	0	N/A	$0	01-01-0001
GES - CONVERSION RESTRICTION	01-01-0001	0	N/A	$0	01-01-0001
IT - BUILDING/STRUCTURE	01-01-0001	0	N/A	$0	01-01-0001
IOTIFICATION	01-01-0001	0	N/A	$0	01-01-0001
ING TRUST FUND	01-01-0001	0	N/A	$0	01-01-0001
SCAPING	01-01-0001	0	N/A	$0	01-01-0001
TING/GLARE	01-01-0001	0	N/A	$0	01-01-0001
S OF CLEARING AND GRADING	01-01-0001	0	N/A	$0	01-01-0001
R MODIFICATION	01-01-0001	0	N/A	$0	01-01-0001
E ATTENUATION / STUDY	01-01-0001	0	N/A	$0	01-01-0001
ING GARAGES	01-01-0001	0	N/A	$0	01-01-0001

DEVELOPMENT CONDITION INFORMATION

ELOPMENT CONDITION STATEMENT DATE: 01-22-2004

I	DUE DATE	TRIGGER NO.	TRIGGER EVENT	CONTRIB AMT	EXPIRATION DATE
DSCAPING	01-01-0001	0	N/A	$0	01-01-0001
T. VEGETATION, PRESERVE	01-01-0001	0	N/A	$0	01-01-0001
IUS DENSITY					
NS	01-01-0001	0	N/A	$0	01-01-0001
SE ATTENUATION	01-01-0001	0	N/A	$0	01-01-0001
CLOSURE	01-01-0001	0	N/A	$0	01-01-0001
ITS OF CLEARING AND GRADING	01-01-0001	0	N/A	$0	01-01-0001
HTING/GLARE	01-01-0001	0	N/A	$0	01-01-0001
NDITION - DEVELOPMENT PLAN	01-01-0001	0	N/A	$0	01-01-0001
CHITECTURE	01-01-0001	0	N/A	$0	01-01-0001
VANCED DENSITY CREDIT					

WAIVERS/MODIFICATIONS

APPROVED WAIVERS/MODIFICATIONS

MODIFY LOADING SPACE REQUIREMENT

MODIFY PERCENT RESIDENTIAL UNITS IN PDC

MODIFY TRANSITIONAL SCREENING REQUIREMENT

VARIANCE FOR HEIGHT OF FENCE IN FRONT YARD

WAIVE 200/75 FT. FROM R-O-W REQUIREMENT

AIVERS/MODIFICATIONS

ROVED WAIVERS/MODIFICATIONS

E BARRIER REQUIREMENT

SUPPLEMENTAL MOTIONS

PLEMENTAL MOTIONS APPROVED

ssapeake Bay Preservation Ordinance

PLEASE TYPE
OR PRINT IN BLACK INK

COMMONWEALTH OF VIRGINIA
COUNTY OF FAIRFAX
APPLICATION FOR ZONING MAP AMENDMENT
PCA/CDPA/FDPA

APPLICATION NO. PCA 86-W-001-10
(Assigned by Staff)
FDPA 86-W-001-5-2

PETITION

TO: THE BOARD OF SUPERVISORS OF FAIRFAX COUNTY, VIRGINIA

I (We), The Peterson Companies L.C., the applicant(s), petition you to adopt an ordinance amending the Zoning Map of Fairfax County, Virginia, by reclassifying from the PDC, WS District to the PDC w/amended Proff/Plan, WS District the property described below and outlined in red on the Zoning Section Sheet(s) accompanying and made a part of this application.

PROPERTY DESCRIPTION

LEGAL DESCRIPTION:
Board of Supervisors of Fairfax County Pcl. 12 2162 103

Lot(s) Block(s) Subdivision Deed Book Page No.

TAX MAP DESCRIPTION:
55-2-((1))-15 PT JHL 7/3/03 ±30.7972 ac. JHL 7/3/03
~~± 34.07960 ac.~~

Map No. Double Circle No. Single Circle No. Parcel(s)/Lot(s) No. Total Area(Ac.or Sq.Ft.)

POSTAL ADDRESS OF PROPERTY: (If any)
None

ADVERTISING DESCRIPTION: (Ex. South of Rt. 236, 1000 feet west of Rt. 274)
Southwest quadrant of the intersection of Fair Lakes Parkway (Rt. 7700) and West Ox Road (Rt. 608), immediately north of Interstate 66.

PRESENT USE: Vacant

PROPOSED USE: Mixed-use multi-family residential and retail

SUPERVISOR DISTRICT: Springfield

The name(s) and address(s) of owner(s) of record shall be provided on the affidavit form attached and made part of this application.

The undersigned has the power to authorize and does hereby authorize Fairfax County staff representatives on official business to enter on the subject property as necessary to process the application.

Jeffrey H. Saxe, Agent for Applicant
Type or Print Name of Applicant or Agent

Signature of Applicant or Agent

The Peterson Companies L.C.
12500 Fair Lakes Circle, Suite 400, Fairfax, VA 22033
Address

LDS 07/14/03 CP
PCA 2003-0395
FDPA 2003-0396

Telephone No. Home Work

Please provide name and telephone number of contact person if different from above.

Francis A. McDermott, Esquire
Hunton & Williams
1751 Pinnacle Drive, Suite 170
McLean, VA 22102
(703) 714-7422

NOT WRITE IN THIS SPACE

Date application received: _____ Application Fee Paid: $ 10,070