

# Chapter 13A-21 – SUBDIVISION DESIGN STANDARDS

**13A-21-01 Purpose ..... 1**

**13A-21-02 Curbs, Gutters, Sidewalks, and Drive Approaches ..... 1**

**13A-21-03 Residential Driveways ..... 1**

**13A-21-04 Culinary Water Systems ..... 1**

**13A-21-05 Fire Hydrants ..... 2**

**13A-21-06 Sanitary Sewer and Other Utility Systems ..... 2**

**13A-21-07 Drainage Systems ..... 2**

**13A-21-08 High Water Table Areas ..... 2**

**13A-21-09 Alteration or Relocation of Natural Waterways ..... 3**

**13A-21-10 Streets ..... 3**

**13A-21-11 Private Streets/Lanes ..... 5**

**13A-21-12 Buffering Along Streets ..... 6**

**13A-21-13 Protection Strips ..... 7**

**13A-21-14 Block Length ..... 7**

**13A-21-15 Bridges, Culverts, etc ..... 8**

**13A-21-16 Walkways and Trails ..... 8**

**13A-21-17 Survey Monuments ..... 8**

**13A-21-18 Easements ..... 8**

**13A-21-19 Public Utilities ..... 9**

**13A-21-20 Street Lighting ..... 9**

**13A-21-21 Lots ..... 10**

**13A-21-22 Flag Lots ..... 10**

**13A-21-23 Seismic Areas ..... 12**

**13A-21-24 Exceptions..... 12**

## **Chapter 13A-21 – SUBDIVISION DESIGN STANDARDS**

### **13A-21-01 Purpose – General Residential Development Standards**

The purposes of this Chapter are:

- A. To promote the health, safety, and general welfare of the residents of the City.
- B. To provide for the orderly development of the City, with adequate provisions for traffic, light, air, recreation, transportation, water, drainage, sewage, and other public requirements.

### **13A-21-02 Curbs, Gutters, Sidewalks, and Drive Approaches**

Curbs, gutters, and sidewalks shall be installed on all existing and proposed streets and along the frontage of any lot within a subdivision in conformance with the City standards, unless exempt by the City Engineer. Inspections by the City are required for the installation of all curbs, gutters, sidewalks, and drive approaches. If the developer/builder fails to notify the City for inspection prior to installation, the City Engineer may require remedial action, including but not limited to, the removal and replacement of the improvements in question.

### **13A-21-03 Residential Driveways**

- A. Driveways shall be provided for all residential building lots. The drive approach for the driveway shall be a minimum width of 12 feet and shall not exceed the maximum width of 35 feet. A secondary drive approach may be permitted upon review and approval by the City Engineer.
- B. No downsloping driveways shall be permitted unless otherwise approved by the City Engineer due to unusual topographic constraints. The driveway must maintain a positive slope away from the home as required by applicable building codes.
- C. The minimum grade at which a driveway shall be allowed to be built is 2% slope, and the maximum grade at which a driveway shall be allowed to be built is 12% slope.
- D. Residential driveways shall be constructed with a minimum concrete thickness of 5 inches installed on a minimum of 6 inches of compacted untreated base course or 6 inches clean, 2 inch minus sewer rock.
- E. Residential driveway approaches shall be constructed with a minimum concrete thickness of 6 inches installed on a minimum of 6 inches of compacted untreated base course or 6 inches clean, 2 inch minus sewer rock.

### **13A-21-04 Culinary Water Systems**

- A. The developer shall extend culinary water systems to each lot within a subdivision as required by the entity providing culinary water.

- B. All trenches located outside of the City rights-of-way and located beneath the driveway or within 5 feet of any public improvement shall be backfilled in 12-inch maximum lifts and mechanically compacted. Backfill and compaction operations shall be certified in writing to the City Engineer by the developer/builder through his licensed professional prior to the City issuing a Certificate of Occupancy.

### **13A-21-05 Fire Hydrants**

Fire hydrants shall be installed by the developer in accordance with City standards, applicable fire codes, and other local ordinances at locations designated on the final plat and City-approved construction drawings.

### **13A-21-06 Sanitary Sewer and Other Utility Systems**

- A. The developer shall extend sanitary sewer systems to each lot in a subdivision as required by the entity providing sanitary sewer systems.
- B. All trenches located outside of the City right-of-way located beneath the driveway or within 5 feet of any public improvement shall be backfilled in 12-inch maximum lifts and mechanically compacted. Backfill and compaction operations shall be certified in writing to the City Engineer by the developer/builder through his licensed professional prior to the City's issuing a Certificate of Occupancy. The developer shall locate and mark at the property line the location of the ends of sanitary sewer laterals. All new dwellings shall connect to sanitary sewer. This shall be reviewed as part of the building permit process.
- C. All trenches for utility installation within the City right-of-way shall be compacted in conformance with City standards. All trenches located outside of City right-of-way, beneath driveways, or within 5 feet of any public improvement shall be backfilled in 12-inch maximum lifts and be mechanically compacted. Backfill and compaction operations shall be certified in writing to the City Engineer by the developer/builder through his licensed professional prior to the City issuing a Certificate of Occupancy.

### **13A-21-07 Drainage Systems**

Surface water runoff drainage systems shall be designed to handle all runoff generated within the subdivision by a 10-year, 3-hour storm and routing of water generated by a 100-year, 72-hour storm. Such systems shall be designed and installed by the developer according to City standards.

### **13A-22-08 High Water Table Areas**

- A. In areas with the potential of ground water impacts, the City Engineer may require a ground water investigation study to be done by a geotechnical engineer and provided to the City for review with the application for final plat approval to include the following:
  - 1. Mitigation measures should be taken to assure that homes will be protected from potential ground water impacts, including a proposed method of ground water disposal to be reviewed and approved by the City Engineer.

2. The developer shall provide ground water information to each lot purchaser/owner and disclose the information on the plat.
- B. If required, ground water drainage systems shall be designed and installed in accordance with construction standards and specifications determined by the City Engineer.
- C. All drainage systems shall be extended to the outer most boundaries of the subdivision by the developer, or further if necessary, to provide service.
- D. The City may prohibit basements in high water table areas upon recommendation from the City Engineer.
- E. If a public utility is outside the public right-of-way, the developer and subsequent homeowner shall be responsible for maintenance.

### **13A-21-09 Alteration or Relocation of Waterways**

- A. A request for alteration or relocation of a waterway shall first be submitted to the City Engineer to ensure the following:
  1. The flow capacity and velocity of the waterway will not change with the proposed alteration or relocation.
  2. The soils conditions in the proposed location will not increase flooding potential.
  3. The proposed waterway can be maintained.
- B. After approval by the City Engineer, alteration or relocation of any waterway shall be submitted and approved by all applicable agencies.

### **13A-21-10 Streets**

- A. All roads and roadway features are required to meet minimum geometric design standards established by the American Association of State Highway and Transportation Officials (AASHTO) and other applicable entities. All street and right-of-way improvements shall be designed and constructed in accordance with the City standards. All signs, pavement markings, and traffic control signals must meet standards established by the Manual on Uniform Control Devices (MUTCD) and other applicable agencies, and related roadway standards established by State, Federal, or local law. Exceptions to applicable standards may be granted by the City Engineer on a case by case basis and shall demonstrate innovative superiority or other advantages over existing standards.
- B. The arrangement, character, extent, width, grade, and location of all streets shall conform to the Transportation Master Plan and shall be considered in their relation to existing and planned streets, topographical conditions, public convenience and safety, and in their appropriate relation to the proposed uses of the land to be served by such streets.
- C. Where the Transportation Master Plan does not show proposed streets, the arrangement of streets in a subdivision shall either:
  1. Provide for the continuation or appropriate projection of existing principal streets in surrounding areas (providing for neighborhood connectivity with the purpose of spreading traffic); or

- 2. Conform to a plan for the neighborhood approved or adopted by the Director to meet a particular situation where topographical or other conditions make continuance or conformance to existing streets impracticable.
- D. At least two points of ingress/egress shall be provided for each subdivision or PUD project unless the project has one or more of the following:
- 1. A single cul-de-sac, hammerhead, or other approved turnaround approved by the UFA and City Engineer that complies with all development standards herein.
  - 2. An emergency access approved by the Director.
  - 3. The future extension of a stub street that will provide additional access including a temporary turnaround approved by the UFA and City Engineer.
- E. Stub streets that are longer than 150 feet shall have a temporary turnaround.
- F. The arrangement of streets in new subdivisions shall make provision for the continuation of the existing streets in adjoining areas and shall provide access to unsubdivided adjoining areas insofar as such continuation or access shall be deemed necessary by the planning commission. New streets must connect with existing public streets.
- G. Street right-of-way widths shall be as shown on the Transportation Master Plan, and where not shown therein, shall not be less than the following:

Street Type	Right-of-Way Width
Major Arterial	106+ feet
Major Collector	80 feet
Minor Collector	66 feet
Local	50 feet
Local Rebuild	42 feet
Private Street/Lane Type	Right-of-Way Width
Private Street	50 feet (26 pavement width minimum)
Private Lane (2-lot maximum)	50 feet (20 pavement width minimum)

- H. Half streets are prohibited.
- I. A cul-de-sac is discouraged but may be permitted on local streets and shall be terminated by a turnaround of not less than 92 feet in diameter as measured from top back of curb to top back of curb. A cul-de-sac shall not exceed 400 feet in length in a residential zone. A cul-de-sac in the Sensitive Area Overlay Zone shall not exceed 600 feet in length unless otherwise permitted by the Planning Commission upon recommendation from the City Engineer. A cul-de-sac length is measured from its intersection with another street to the end of the cul-de-sac turnaround.
- J. Streets shall be laid out so as to intersect as nearly as possible at right angles.
- K. No street names shall be used which will duplicate the names of existing streets. Street names are subject to the approval of the Director and Salt Lake County Recorder’s Office.

- L. Local streets shall be laid out to provide neighborhood connectivity so that traffic is distributed out evenly.
- M. Where a subdivision borders on or contains a railroad right-of-way or limited access highway right-of-way, the Planning Commission may require a local access street approximately parallel to and on each side of such right-of-way.
- N. Where a subdivision abuts or contains existing double frontage lots or a proposed arterial or collector street, the Planning Commission may require local access streets, reverse frontage with screen planting contained in a nonaccess reservation along the rear property line, deep lots with rear service alleys, or other such treatment as may be necessary for adequate protection of residential properties and to provide separation of thru and local traffic.
- O. Parkstrips shall be required on all streets unless otherwise determined by the Planning Commission. They shall be designed and installed according to the City standards.
- P. The requirements of this Section may be waived or modified by the Planning Commission after considering a recommendation from the City Engineer and the location and intended use of the proposed street.

### **13A-21-11 Private Streets/Lanes**

Full-width public street systems shall be installed for access to all residential dwelling sites, unless exempted by the Planning Commission. A private street/lane system may be approved where it can be shown, based upon property width, connectivity (or the inability to connect to the existing street patterns), topographical concerns, overall subdivision design, the ability to provide service (which includes but is not limited to snow plowing, street sweeping, trash collection, and overall street maintenance), that a full width public street may not be the best solution for a new subdivision.

#### **A. Private Street**

1. All roads and roadway features are required to meet minimum geometric design standards established by the American Association of State Highway and Transportation Officials (AASHTO) and other applicable entities. All street and right-of-way improvements shall be designed and constructed in accordance with the City standards. All signs, pavement markings, and traffic control signals must meet standards established by the Manual on Uniform Control Devices (MUTCD) and other applicable agencies, and related roadway standards established by State, Federal, or local law. Exceptions to applicable standards may be granted by the City Engineer on a case by case basis and shall demonstrate innovative superiority or other advantages over existing standards.
2. Approved private streets for access to residential dwelling structures shall have a 50-foot right-of-way and a 26-foot minimum width paved surface.
3. Private streets shall have appropriate turnaround(s) as determined by the City Engineer and UFA.

4. The City Engineer and UFA shall have the authority to require more than one access road based upon the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions, or other factors that could limit access.
5. Private streets shall not be obstructed in any manner including the parking of vehicles. The minimum widths and clearances shall be maintained at all times.
6. All private streets shall be constructed in accordance with the latest edition of the City standards, this Land Development Code, and all other applicable City ordinances.
7. If a private street is approved, a perpetual maintenance plan shall be established for the homeowners association so that the street is continually maintained as designed.
8. Whenever a subdivision is approved with a private street, the final subdivision plat shall include a statement that no City maintenance is provided on the private street.

#### **B. Private Lane**

1. Approved private lanes two-lot maximum for access to residential dwelling structures shall have a 25-foot right-of-way and a 20-foot minimum width paved surface.
2. Private lanes cannot access more than two residential dwellings.
3. The City Engineer and UFA shall have the authority to require an increase in the minimum access widths where they are inadequate for fire or fire rescue operations.
4. The City Engineer and UFA shall have the authority to require more than one access road based upon the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions, or other factors that could limit access.
5. Private lanes shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances shall be maintained at all times.
6. All private lanes shall be constructed to meet all applicable requirements related to culinary water and storm drainage.
7. Whenever a subdivision is approved with a private lane, the final subdivision plat shall include a statement that no City maintenance is provided on the private lane.

#### **13A-21-12 Buffering Along Streets**

Residential developments shall not permit motor vehicle access directly onto an arterial, major collector, or minor collector street or roadway from individual residential lots. No new residential developments shall be permitted within the City which abut an arterial without requiring improvements along the entire length of the development as it abuts the arterial street. The following standards shall apply:

- A. The Planning Commission may require a barrier wall 6 feet in height (measured from the highest elevation on either side of the wall). Where soil retention is required, walls may be up to 8 feet in height (retaining wall and barrier wall combined). Wall design and coloration shall be block, brick,

or concrete. Concrete strips placed at the base of the fence shall be required to eliminate gaps between walls and sidewalks.

- B. Curb, gutter, and sidewalk shall be designed to specifications approved by the City Engineer.
- C. A landscaped buffer between the sidewalk and street curb shall be installed according to City standards. In order to facilitate the planting of street trees, an 8 foot parkstrip and 5-foot sidewalk is the standard requirement. Reduced parkstrip and sidewalk width may be approved based upon the size, scale, and nature of the project, and the type of existing improvements on adjacent properties. However, a 10-foot cross-section (5-foot parkstrip, 5-foot sidewalk) is a minimum and may necessitate tree planting behind the sidewalk.
- D. Sprinkling system and water connections sufficient to maintain landscaping in all buffer areas shall be approved by the Director.
- E. An additional landscaped buffer, including sprinkling and water connections, may be required by the Planning Commission between the sidewalk and barrier wall where it is impractical for the barrier wall to abut the sidewalk. The specific width of the buffer and landscaping specifications shall be determined by the Planning Commission upon recommendation by the Director at the time of subdivision review.
- F. Provisions or plans for perpetual maintenance shall be submitted with the landscape design.

### **13A-21-13 Protection Strips**

Reserve or protection strips controlling access to streets shall be prohibited.

### **13A-21-14 Block Length**

- A. The lengths, width, and shapes of blocks shall be determined by the following:
  - 1. Provision of adequate building sites suitable to the special needs of the type of use contemplated.
  - 2. Zoning requirements as to lot size and dimensions.
  - 3. Needs for convenient access, circulation, control, and safety of street traffic.
  - 4. Limitations and opportunities of topography.
- B. Block lengths shall not exceed 800 feet.
- C. Pedestrian crosswalks shall be required where deemed essential to provide circulation or access to churches, schools, playgrounds, shopping centers, transportation, and other community facilities in accordance with City standards.

### **13A-21-15 Bridges, Culverts, etc.**

The developer/subdivider shall pay all costs of designing, constructing or installing any bridge, pipe, culvert, or other structure required by the City to provide access to or cover any ditch, canal, jurisdictional wetlands, etc. within the subdivision or adjacent thereto.

Automotive bridges / culverts shall be designed to accommodate automotive and safe pedestrian traffic.

### **13A-21-16 Walkways and Trails**

- A. Walkways with a width of 6 to 10 feet in width may be required within a subdivision. This will be determined on a case by case basis after review by City staff.
- B. The developer may be required to dedicate a sufficient amount of property to be used exclusively as a pedestrian access walkway. Such parcels to be dedicated shall be located in a position within the development as determined by the Planning Commission. The parcel shall also be of a size large enough to allow for such a walkway, such size to be determined by the Planning Commission.
- C. The developer may be required to install upon the walkway such improvements as determined by the Planning Commission and the City Engineer. All such improvements shall be erected and constructed in accordance with standards as may be established by the Planning Commission and City Engineer.
- D. **Pedestrian and Bicycle Paths.** Where appropriate, the internal circulation system shall provide pedestrian and bicycle paths which may be physically separated from vehicular traffic to serve residential, nonresidential, and recreational facilities in or adjacent to the development. The Planning Commission may require connections to regional trail systems, activity centers, pedestrian and/or bicycle overpasses, underpasses, or traffic signalization in the vicinity of schools, playgrounds, parks, shopping areas, or other uses that will receive considerable pedestrian and/or recreational trails use from the development.

### **13A-21-17 Survey Monuments**

Survey monuments shall be indicated on the final plat. A permit and approval from the Salt Lake County Surveyor's Office for the installation of survey monuments must be obtained prior to the setting of any survey monuments and before any subdivision improvements are accepted.

### **13A-21-18 Easements**

- A. Easements for utilities and drainage shall be provided where necessary as determined by various public utility agencies, and the City Engineer.
- B. Easements for surface water runoff drainage, canals, irrigation ditches, waterways, clear vision areas, and rights-of-way within the subdivision and across adjoining property may be required by the City when necessary to properly serve the subdivision or protect its citizens.
  - 1. Open ditches shall not be allowed within or adjoining a subdivision. The developer/subdivider shall work with ditch irrigation companies and the City Engineer as to:

- a. Methods of covering, realigning, or eliminating ditches, pipes, or canals within or adjoining the subdivision.
  - b. The size of pipe and culverts required.
  - c. The responsibility for the periodic inspection, cleaning, and maintenance of such ditches, pipes, and culverts shall be reviewed by the City Engineer. In cases where ditches cross public roads or proposed public roads, specifications and grades for pipe or culvert must be approved by the City Engineer in accordance with the City's specifications.
2. The developer/subdivider may be required to install a 6-foot, nonclimbable fence or its equivalent along all open ditches, canals, waterways, open reservoirs or other bodies of water, railroad rights-of-way, and other such features of a potentially hazardous nature, on or contiguous to the property being subdivided as determined by the Planning Commission.
  3. After installation and acceptance by the City, individual property owners are responsible for maintenance of fences or portions of fences erected upon their property and shall hold the City harmless for any and all defects of workmanship, maintenance, repair, and liability arising from the erection or intended use of said fence.
- C. Easements for public trails shall be provided where necessary as determined by applicable public agencies, including the Salt Lake County Parks and Recreation Department and the U. S. Forest Service.

#### **13A-21-19 Public Utilities**

- A. The developer shall be responsible for the installation of service lines prior to street paving.
- B. All utilities which will serve the parcel being subdivided shall be buried beneath the surface of the ground and shall be located within the easements provided for such use or within the streets at a location to be determined by the City.
- C. All utility structures shall be included as part of the construction drawings submitted with the final plat.
- D. There shall be no above-ground utility structures placed in a right-of-way but may be placed out of the public right-of-way in a public utility easement as approved by the City Engineer.

#### **13A-21-20 Street Lighting**

- A. The developer shall follow the current requirements for streetlights.
- B. The street lights shall be placed as approved by the Director. Such items to be approved include appropriate distance, alternating sides of street, location upon the property, street light type, height, and illumination intensity as determined by the City's specifications.

**13A-21-21 Lots**

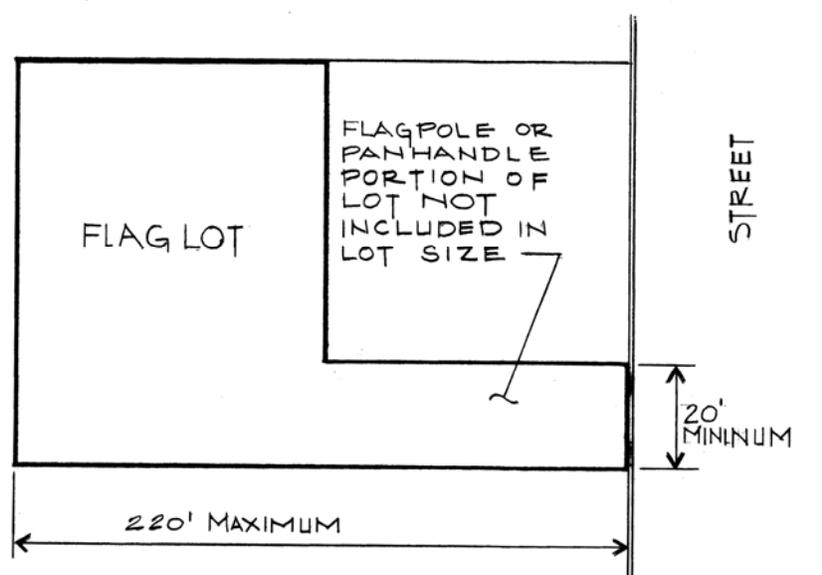
- A. Every parcel of land created by a subdivision shall comply with the minimum lot size requirements of this Code and shall be platted as part of a subdivision. No parcel of land shall be created or left unplatted which is either undevelopable or serves merely as a nuisance or lot remnant.
- B. Except as may be otherwise provided in this Development Code, all lots shall have the required frontage upon a dedicated and improved street. Exceptions may include the following:
  - 1. Residential building lots that do not have frontage upon a public street shall obtain an exception from the Planning Commission as part of the preliminary review process.
  - 2. Commercial building lots within a recorded subdivision are exempt from this requirement. They may be developed without direct frontage upon a public street.
- C. Where a canal or exclusive utility easement abuts a subdivision, the area or portion of the canal which is located in the lot(s) shall not be included in the computation of total lot size nor side or rear yard setbacks for purposes of determining compliance with the Development Code.
- D. All lot corners, points of curvature, tangency, and bearing changes shall be marked with permanent metal stakes approved by the City. The front corners of the lot shall be marked as per the City standards.
- E. Double frontage and reverse frontage lots shall be avoided except where essential to provide separation of residential development from traffic arteries or to overcome specific disadvantages of topography and orientation.
- F. Where possible, side lot lines shall be substantially at right angles to street lines.

**13A-21-22 Flag Lots**

In order to encourage the more efficient use of land, flag, or L-shaped lots may be allowed as an exception (a permitted use within the Sensitive Area Overlay District) subject to the following conditions:

- A. A flag or L-shaped lot shall be comprised of a staff portion contiguous with the flag portion thereof.
- B. The staff portion of said lot shall front on and be contiguous to a dedicated public street or private street. The minimum width of the staff portion of a flag lot shall be 20 feet, and the maximum length shall be 220 feet unless otherwise approved by the Planning Commission upon recommendation of the UFA.
- C. A flag lot shall not gain access via an easement on an adjacent property.
- D. No building or construction, except for driveways, shall be allowed on the staff portion of said lot unless the minimum width thereof is the same or greater than the minimum width for a lot as allowed in the underlying zone (excluding entrance features and street lights).
- E. The front side of the flag portion of said lots shall be deemed to be that side nearest to the dedicated public street or private street upon which the staff portion fronts, unless otherwise determined by staff on a case-by-case basis.

- F. The staff portion of said lots shall be deemed to end, and the flag portion of said lots shall be deemed to commence at the extension of the front lot line.
- G. The square footage located in the flag portion of said lot, which shall be exclusive of the square footage located in the staff portion of said lot, shall be the same or greater than the minimum square footage as required in the underlying zone, but in no instance shall be less than 8,000 square feet.
- H. The front, side, and rear yard requirements of the flag portion of said lots shall be the same as is required in the underlying zone.
- I. No more than two flag lots can be served by the staff portion.
- J. All flag lots in the development shall be approved by the Planning Commission.
- K. The maximum number of flag lots in the subdivision shall be not more than 20% of the total number of lots within the subdivision unless otherwise approved by the Planning Commission.
- L. The approved building envelope shall be illustrated upon the final plat
- M. Below is an example of a flag lot and is included herein to illustrate the concept of a flag or L-shaped lot.
- N. A duplex, twin home, or any other multi-family dwelling shall not be located on a flag lot.



**Chapter 21 - Figure 1 – Flag lot minimum design standards**

**13A-21-23 Seismic Areas**

Any subdivision or lot on or adjacent to a seismic area shall comply with provisions of the Sensitive Area Overlay Zone.

**13A-21-24 Exceptions**

Any exception authorized by the Planning Commission as allowed in this Chapter shall be shown on the final plat, and the reasons for such exception shall be entered in writing in the minutes of the Planning Commission meeting.