Appendix A
Newark Areas 3 and 4 Specific Plan
NEWARK SPECIFIC PLAN
AREA 3 & 4 OF THE GENERAL PLAN

PREPARED FOR THE CITY OF NEWARK, CA
September, 2009
# LIST OF CONSULTANTS

<table>
<thead>
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<th>Company</th>
<th>Address</th>
<th>Phone</th>
</tr>
</thead>
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</tr>
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<td>415.512.1300</td>
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</tbody>
</table>
CITY OFFICIALS ACKNOWLEDGEMENTS

(Terrance to provide a list of Names & Titles if desired)
HOW TO USE THIS PLAN

This Plan herein establishes three residential neighborhoods, and the standards and guidelines for development or each of those neighborhoods. The Planning Director is given the authority for Site Plan & Architectural approval for the design of each Neighborhood as long as the designs are in compliance with the provisions in this Plan. City Council approvals are required for all Tentative & Final Maps, which may be processed ahead of or after review by the Planning Director for Site and Architectural approval.
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NEWARK SPECIFIC PLAN DELINEATION
AREA 3 & 4 CITY OF NEWARK, CA
1. Introduction & Background

The Specific Plan covers 856 acres of land in the western edge of Newark. There are two areas currently identified in the General Plan as Area 3, which is 296 acres and Area 4, which is 559 acres. Area 3 is the land bounded by Mowry Avenue, Stevenson Blvd., Cherry Street and the Union Pacific Railroad. The current General Plan for the area is: Special Business Park, Public Open Space and Public Institutional. The Specific Plan guidelines are intended to apply only to the southeastern-most 77 acre portion of Area 3. The remaining portion of Area 3 is not proposed to be changed. Area 4 is the land west of the Union Pacific Railroad extending to the Mowry Slough. Mowry Ave is the northern boundary with a flood control channel and the Durham Road Landfill in Fremont as the southern boundary. The current General Plan designation is Low Density Residential with the requirement of a Specific Plan being adopted prior to development. The General Plan envisions “high quality” residential uses along with a “golf course”. According to the General Plan Text” ... if the development of a Golf Course ... is unfeasible as determined by the City, then residential may proceed with other recreation facilities acceptable to the City when a Specific Plan is adopted by the City...”.

There are several property owners in Area 3 and 4, but only the “Newark Partnership” holdings are contributing to the costs of the Specific Plan and EIR at this time. As other property owners seek to develop pursuant to the Plan, the City shall recover a pro-rata share of the costs of the preparation of the Plan from them to reimburse the present property owners. The exhibit following, “Specific Plan Property Ownership Map”, shows all the relevant ownerships within the Specific Plan’s boundary. The Newark Partnership controls the parcels identified as: 9, 10, 11, 28, 33, 34, 35, 38, and 39.

2. Specific Plan Land Use

a. Introduction. Major land uses for the Specific Plan include Residential, Golf Course, and reserve land in which no development is planned and no changes in existing designations or zoning are proposed. Their locations are depicted on the “Specific Plan Land Use Diagram”. In addition to those land uses, the plan’s diagram also shows a new two lane bridge over the railroad connecting Stevenson Blvd with a two lane main entry road on the southwest side of the railroad leading into Area 4.

b. Sub Areas. The Specific Plan is divided into six sub areas, as identified on the “Specific Plan Land Use Diagram” as follows:

   • Sub Area A. Sub Area A is the 77 plus acres of land bounded by Cherry Street, Stevenson Blvd, ACFC & WCD’s flood control channel, and the existing and developed Industrial uses located on the southwestern edge of this sub-area. Uses planned for this area include single family detached homes on lots varying in size, attached or stacked housing, and school/park up to 12 acres in size. The school/park area is to take vehicle access from Cherry Street via an internal street connecting directly to Cherry Street. A pedestrian trail will be located adjacent to the Flood Control Channel to connect the School/Park with the residential area. To promote pedestrian and bike traffic from the residential area to the recreation use to the North, a pedestrian bridge across the
### AREA 3 OWNERSHIP TABLE

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<td>EUREKA PROPERTY MANAGEMENT</td>
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<td>5.841 ± acres</td>
<td>STEVENSON POINT TECH-PARK OWNERS ASSOCIATION</td>
</tr>
</tbody>
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* denotes property owners information obtained via facsimile provided by First American Title Insurance Co.
Channel will be provided. The bridge will be carefully placed to line-up with the walkways in the Ohlone College facility next door.

Sub Area A is currently designated as Special Industrial under the General Plan and zoned as MT-1 High Technology Park. The General Plan will be amended to a Low Density Residential designation for Sub Area A, and it will be rezoned R Residential to allow construction of single family detached homes, as contemplated by this Plan.

- **Sub Area B.** Sub Area B consists of 125 plus acres of land south of the main entry “Access Road” on the western side of the railroad. Approximately 86 acres are upland and the remaining are “wetlands”. The area, except for the Access Road and a short length of the railroad, is bounded by land zoned and currently utilized for agriculture. Only single family detached homes of varying lot sizes, a small “nature Park” are envisioned within this sub area. Vehicular access to this sub area will be via a new two lane bridge from Stevenson Blvd over the railroad connecting with the main entry’s two lane access road. An esplanade is planned on the north side of this two lane road.

Sub Area B is currently designated as Low Density Residential under the General Plan and zoned as A Agricultural. Sub Area B will be rezoned R Residential to allow construction of single family detached homes as contemplated by this Plan.

- **Sub Area C.** Sub Area C consists of 90 plus acres of land bounded by the western edge of the railroad, southern edge of the Flood Control Channel, the northern edge of the main entry “Access Road”, and the western edge currently zoned and utilized as agriculture. There are about 62 acres of uplands and the remaining are “wetlands” in this sub-area. This area is planned for all single family detached residential, or for single family detached residential land, some golf course, or all golf course. A small nature park will be located on the western edge of any residential usage.

Sub Area C is currently designated as Low Density Residential under the General Plan and zoned as A Agricultural. Sub Area C will be rezoned R Residential to allow construction of single family detached homes or a golf course in accordance with this Plan. The addition of a golf course will require a conditional use permit. A golf course is in accord with the objectives and purposes of the R Residential district because it will help to assure there is adequate light, air, privacy, and open space for each dwelling, as it is located in a Residential district. The golf course will not be detrimental to the public health, safety or welfare, or materially injurious to properties or improvements in the vicinity because it will be located adjacent to existing residential uses, as well as Ohlone College. The golf course design will be of the highest quality, and therefore will produce an environment of stable and desirable character consistent with the objectives of the zoning code. Lastly, the variety of land uses in the development will complement each other and will harmonize with existing and proposed land uses in the vicinity as discussed above.

- **Sub Area D.** Sub Area D consists of 100 plus acres of land on the north side of the flood control channel, west of the railroad tracks, and the south side of Mowry Road. There are approximately 75 acres of uplands and the remaining are “wetlands” in this area. The entire sub area is reserved for a Golf Course or other recreational uses.
Sub Area D is currently designated as Low Density Residential under the General Plan and zoned as A Agricultural. Sub Area D will remain zoned A Agricultural, which will allow construction of a golf course or other recreational uses in accordance with this Plan. The addition of a golf course or other recreational uses will, however, require a conditional use permit. A golf course or facility for other recreational use is in accord with the objectives and purposes of the A Agricultural district, as it helps to reserve appropriately located for agricultural and natural resource production uses. The golf course or facility for other recreational use will not be detrimental to the public health, safety or welfare, or materially injurious to properties or improvements in the vicinity because it will be located adjacent to existing residential uses, as well as Ohlone College. The golf course design will be of the highest quality, and therefore will produce an environment of stable and desirable character consistent with the objectives of the zoning code. Lastly, the variety of land uses in the development will complement each other and will harmonize with existing and proposed land uses in the vicinity as discussed above.

- **Sub Area E.** Sub Area E is the remaining area on the western side of the railroad and contains 244 plus acres of land. There are approximately 53.5 acres of uplands with the remaining being “wetlands” in this sub area. Both the existing General Plan designation and Zoning will continue to apply.

- **Sub Area F.** Sub Area F is the remaining 221 plus acres of land on the northeastern side of the railroad in Area 3. No change in the current usage is envisioned by this Specific Plan with this sub area. Both the existing General Plan designations and the Zoning limitations will continue to apply.

c. **Residential Density.** The Residential holding capacity for the Specific Plan is set at 1,260 dwelling units. Housing may only be located within the residential designated sub areas A, B, and C of the Land Use Plan. At this time the 1,260 units are allocated only to the “Newark Partnership” holdings. Any other Owner of property within the residential portions of the plan may obtain appropriate density through a major amendment to this Specific Plan.

d. **Conceptual Neighborhood Sketches.** On the plates that follow, several conceptual layouts for the various residential neighborhoods are shown. These are presented only for visualization purposes to depict how these neighborhoods could develop.

3. **Siting Standards & Architectural Design Guidelines**

a. **Introduction. Single Family Lot Standards.** Five lot sizes are contemplated in the Specific Plan along with attached or stacked housing. The four plates that follow provide the lot criteria for 45’x70’ lots, 50’x80’ lots, 55’x80’ lots, and 60’x80’ lots. No criteria are provided for custom lots since they will be irregularly shaped. The Planning Director will establish appropriate setbacks during site and architectural review of a particular home on a custom or irregular lot. The standards for the attached and/or stacked housing criteria are listed following the SFD standards.

The architectural design concept of any housing is also shown on the plates. Custom and attached and/or stacked housing should be designed to be compatible with these design
concepts. Other compatible design concepts may be considered as a minor amendment to the Specific Plan if they are deemed to be of equal or better quality than the ones presented herein.

b. Multi-Family Siting Standards. The Standards listed below are minimum, except for when they refer to a maximum allowed item. The architectural theme should be compatible and related to the Single Family Detached Themes.

- Maximum Height: Sixty feet
- Front and street side setbacks: Twenty feet
- Interior and rear setbacks: Ten feet
- Between parking or circulation areas and a public street right of way or private street easement: Fifteen feet
- Maximum Lot coverage: Fifty percent
- Common open space can be indoors or out
- Common open space shall be provided at 500 sq. ft. for the first five units and an additional fifty square feet for each additional unit
- Common open space shall not be located within required setbacks
- Balconies (above ground level) Minimum sixty square feet with a minimum interior dimension of six feet
- Patios (at ground level) Minimum one hundred square feet with a minimum interior dimension of ten feet
- Studio and one bedroom: One covered parking space for residents and one-half uncovered guest space
- Two bedroom and larger: One covered space for residents, one-half space for residents and one-half uncovered guest space
- Seniors: One-half covered space for residents and one-half uncovered space for guests.

4. Engineering & Improvements

a. Introduction. The majority of the Sub-Areas within the Specific Plan are undeveloped requiring new infrastructure including public street networks, underground utility systems, grading of the topography and other infrastructure. The Specific Plan is located within the City of Newark Urban Service Area, with several utility districts governing various aspects of public utility infrastructure. The plan area is bounded by three public streets with existing utility infrastructure: Mowry Avenue, Cherry Street, and Stevenson Boulevard. The overall capacity and existing condition of this public infrastructure is adequate to serve the planned uses, however, some improvements and upgrading of existing utilities are necessary. This section establishes standards and policies for the design and installation of new engineered infrastructure for the Specific Plan. It takes into account long-term development objectives for the complete build-out of the plan and establishes the proper framework necessary for future development.

b. Street Design Standards. The residential street networks within the Specific Plan are designed to be dedicated as public streets maintained by the City of Newark. With the exception of the esplanade within Area 4, the remainder of the street network is designed in accordance with the street sections provided in this plan. Any deviations from these standards will require review and approval by the City of Newark.
NOTES:
A. ALL DIMENSIONS ARE MINIMUM.
B. YARD ENCROACHMENTS AS ALLOWED BY N.M.C.
C. PORCHES MAY ENCROACH TO WITHIN 10' OF STREET
   R.O.W. MINIMUM PORCH DEPT OF 7' REQUIRED.
NEWARK SPECIFIC PLAN AREA
ARCHITECTURAL DESIGN THEME AND SITING TEMPLATE

NEWARK, CA
NEWARK SPECIFIC PLAN AREA
ARCHITECTURAL DESIGN THEME AND SITING TEMPLATE

NEWARK, CA

NOTES:
A. ALL DIMENSIONS ARE MINIMUM.
B. YARD ENCROACHMENTS AS ALLOWED BY N.M.C.
C. PORCHES MAY ENCROACH TO WITHIN 5' OF STREET
R.O.W. MINIMUM PORCH DEPT OF 5' REQUIRED.

SINGLE FAMILY DETACHED
45' x 70' CONVENTIONAL HOMES
• **Residential Streets.** All residential streets will be standard City of Newark “Type I – Minor Streets” with a 56 foot right-of-way. Cul-de-sacs will be designed per city standards as well with a curb radius of 45 feet and right-of-way radius of 50 feet.

• **Stevenson Boulevard Overpass.** Due to the at-grade railroad crossing at the entrance into Area 4 on Stevenson Boulevard, an overpass bridge needs to be constructed for vehicular and pedestrian traffic. This is the preferred option with respect to public safety at an existing at-grade crossing. This will completely separate street traffic from rail traffic further enhancing this intersection. Design and construction of this overpass will require close coordination with various public agencies including the City of Newark, Union Sanitary District, the Public Utilities Commission, and Union Pacific Corporation. The overpass location faces several significant design considerations including the railroad, wetlands, high-voltage transmission lines and large sanitary sewer force mains in the area. Advanced preliminary designs have been completed for the overpass including catenary surveys of the transmission lines by PG&E, structural design of the overpass with respect to traffic load and structural support, and embankment design of the approach ramps. The engineered design of the bridge section for a single 12 foot travel lane in each direction adjacent to 5 foot wide bicycle lanes. Each direction is separated by a center median island. One side of the bridge will have a pedestrian sidewalk with safety rails attached to the edge of the overpass. Within the span of the bridge, utility sleeves will accommodate public utility systems to serve the Area 4 including possible sanitary sewer, water, gas, electric, and communication facilities. The bridge spans across the Union Pacific Railroad right-of-way and directly beneath the high-voltage transmission lines. PG&E performed survey and design review of their lines, and concluded that The Dumbarton Newark 115 kV line will require replacement of one tower with a new tubular steel pole. It also concluded that the other line, The Newark Ravenswood 230 kV line, will require an extension of the nearest tower to raise it approximately 20 feet. These improvements allow the construction of the bridge to meet minimum clearance safety requirements above the railroad tracks and beneath the transmission lines.

• **Intersection Design.** The residential intersections and cul-de-sacs require specific design implementations to meet drainage, accessibility, and emergency requirements. A typical intersection of two residential streets with a 56 foot right-of-way is shown on the street standards Plate. Caltrans standard signage and striping will be used at all four-way intersections to include stop bars and stop signs in each direction as required by the city engineer. Streets will be crowned with a typical 2% cross slope and should be designed to provide adequate drainage through the intersection of crowns. On-street parking will be located at least 50 feet from the end of curb returns to provide sufficient clearance for turning movements of emergency vehicles.

c. **Topography & Grading.** The areas covered by the Specific Plan contain various topographic and drainage features that require specific guidelines in order to ensure conformance with local agency requirements as well as minimal impact to natural topography. The existing elevations within Sub Area A range from approximately 9 to 20 feet above mean sea level. The existing elevations within Area 4 range from approximately 0 to 16 feet above mean sea level. Existing drainage patterns within both sites currently drain runoff to various locations. Sub Area A discharges into the man-made Alameda County Flood Control Channel Line D abutting the western portion of this sub area. Area 4 discharges towards Mowry Slough.
generally from northeast to southwest. Drainage is collected within ditches that discharge at an existing pump, which in-turn lifts the water over the top of the levee where it discharges to Mowry Slough. The grading and drainage designs for the various aspects of the Specific Plan need to take into account the following goals and policies:

- **Flood Elevation Requirements.** Sub Area A is classified as Zone X. This indicates that the area has shallow flooding of less than one foot for the 100-year base flood or is prone to 500-year flooding. Area 4 is largely classified as Zone AE. In the event of 100-year flooding conditions, water up to an elevation of eight feet NGVD would flood that area. Development within the Specific Plan is required to comply with the City of Newark flood elevation standards. The building pads of all occupied structures will be elevated to a minimum of 11.25 feet above mean sea level with the finished floor being a minimum of 6 inches above the building pad. The top of curb grades for residential streets will be no less than 10.00 feet above mean sea level. All un-occupied structures (i.e. golf storage areas, sheds etc.) will either be elevated above the base flood elevation or flood proofed per city requirements.

- **Grading & Drainage.** Sub Area A will be designed to honor existing drainage patterns and release locations on the subject property. The residential pads will be elevated above the 100-year flood zone elevations mapped for Flood Channel Line D, where applicable across the site. The existing dual 42” outfall at the southwest corner of the site will be used to discharge storm water from the site. Because of the elevation requirements of the flood zone certain areas of Sub Area A require fill where existing elevations are too low. Overall approximately 56,000 cubic yards of fill is required based on the Conceptive Grading Plan. Due to the large size of Sub Area A this will be mitigated with cuts from existing portions of the site where elevations are higher than necessary.

Area 4 will need to be elevated above the minimum City and FEMA base flood elevation requirements. Due to these elevation requirements significant amounts of imported fill will be necessary to elevate the site. Area 4 will need between 1.1 and 2.1 million cubic yards of fill. This fill can be achieved by a combination off off-site import and on-site excavation from elevated areas. The elevated site will be utilized to provide discharge outfalls at various locations to convey stormwater runoff out of the underground pipe network. This runoff will then discharge via natural drainage courses to the existing drainage pump and out to Mowry Slough.

The golf course design in Area 4 will be graded along the existing terrain dependent on the ultimate layout of the course. The clubhouse and other buildings will be required to be elevated above the base flood elevations; however, the course will be constructed along the natural terrain to achieve an earthwork balance within the course.

The drainage systems within the plan area are similar to most new developments. Lots, streets, and parks will be graded to convey surface runoff to new inlets within the development, which will then transport the storm water through underground piping networks to the discharge outlets. All public and private streets are to be designed to comply with the requirements of the City of Newark. All grading should conform with the general intent Conceptive Grading & Drainage Diagram. Changes to the grading as
shown on the conceptual plan should follow the same general patterns and be subject to review and approval by the city.

All grading should conform with the general intent Conceptive Grading & Drainage Diagram. The diagram portrays potential grading intents for the maximum potential fill necessary to develop the sub areas. This includes a potential for residential development within Sub Area C. Should a golf course alternative be pursued in that area then different elevation requirements apply as described above. Changes to the grading as shown on the conceptual plan should follow the same general patterns and be subject to review and approval by the city.

- **Soil Import & Stockpiling Operations.** Due to the significant quantity of fill material required to raise elevations across the site, a potentially long-term import operation may be required to acquire the dirt necessary. This import operation will require preparation of grading plans, long-term erosion control plans, and other documents necessary to design and implement proper import requirements and best management procedures. A Grading Plan will be developed for mass-grading operations and soil stockpile management, which will require review and approval of the city and appropriate local agencies. This plan will be prepared in conjunction with a geotechnical investigation with recommendations for fill materials, import sources, earthwork guidelines, settlement monitoring, and other criteria.

- **Storm Water Treatment.** Any development within the Specific Plan is required to prepare and submit project-specific Storm water Pollution Prevention Plans (SWPPP) and Storm water Management Plans (SWMP) to determine and implement storm water runoff treatment measures to reduce potential impacts from sediment-laden runoff and other pollutants.

Developments will utilize a combination of various storm water treatment options for post-development treatment measures. These include the use of vegetated bio-swales, infiltration trenches, media filtration devices, hydrodynamic separators, retention/detention ponds, and other potential measures. Dependent on design constraints, one or all of these measures will be implemented. “Green-Treatment” methods will also be evaluated and implemented with first priority in accordance with NPDES permit guidelines.

All aspects of the Specific Plan requires to comply with the National Pollutant Discharge Elimination System (NPDES) permit program, Alameda County Clean Water Program, City of Newark requirements, and other applicable local, state and federal requirements.

d. **Infrastructure & Utilities.** The Specific Plan requires new public and privately maintained utility infrastructure to serve the uses. The existing sites are primarily undeveloped land; therefore, almost no existing infrastructure resides within the development envelopes. The utility goals and policies in this section are broken down for Sub Area A and Area 4 separately in some portions, due to the variety of requirements between each. All discussion in this section refers to the Conceptive Utility Diagram.
• **Storm Drainage.** Sub Area A currently discharges via overland release towards the southwest corner to an existing dual-42” concrete culvert. This culvert releases into the existing flood channel and is permitted to a maximum discharge rate by Alameda County Flood Control & Water Conservation District, (who maintains the channel.) A conventional underground storm drainage system, designed to City of Newark design standards, will include trunk and collector lines that convey surface runoff to the existing outfall. The future development of Sub Area A will not create new storm drain connections to Stevenson Boulevard or Cherry Street. Should additional new outlets be required to the flood channel, approval will be required by the ACFC&WCD.

• **Storm Drainage – Area 4.** Existing drainage in this Area is collected via drainage ditches that terminate at an existing pump, which then discharges the runoff above the existing levees surrounding the southern perimeter of the area. Modifications to these existing drainage patterns are required to serve the individual proposed uses. The various sub areas will be served by a conventional underground storm drainage systems, which will convey surface runoff to new outfalls located at various locations around the perimeter of the whole area. Due to the elevation requirements for residential pads, Area 4 should not require any pump systems to convey the underground drainage adequately. However, should pumps be necessary, they would be privately owned and maintained. The ultimate locations and quantities of the outlets will be dependent on the future residential layouts of the sub areas, but should conform to the Conceptive Grading & Drainage Diagram. The golf course within Area 4 will utilize on-site storm water treatment systems that can possibly function as storm water retention and/or detention basins well-integrated within the golf course landscape design.

• **Sanitary Sewer – Area 3.** Sanitary Sewerage within the City of Newark is operated and maintained by Union Sanitary District (USD). Area 3 is within the existing jurisdictional boundaries of USD, however, Area 4 will have to be annexed into the district. Existing sanitary sewer mains exist within Mowry Avenue, Cherry Street and Stevenson Boulevard to serve the proposed development areas. Existing force mains also exist within the railroad right-of-way which pump sewerage from the Cherry Street Pump Station located within Area 4 southeastward towards the Boyce Avenue Station. The future developments of Area 3 and 4 will not be allowed to connect to this existing force main due to capacity and maintenance issues with the existing system. Sub Area A will have conventional underground sewer systems within the public streets that will connect to the existing system within the intersection of Cherry Street and Stevenson Boulevard. Dependent on the ultimate design and layout of the Sub Area the new system may or may not require a pump system to convey flow to the existing public systems. Multiple connections will be made to this system off Cherry Street and Stevenson Boulevard. The development of Sub Area A may require improvements or contribution to improvements within Stevenson Boulevard to extend a new public sewer main to the intersection of Cherry Street and Stevenson Boulevard. This extension will need to be designed to take into consideration depth and sizing needs of the future Area 4 development, as well as existing infrastructure clearance requirements.

• **Sanitary Sewer – Area 4.** Development of the Sub Areas within Area 4 will require new privately owned and maintained pump stations primarily due to the lack of existing public infrastructure near the development envelopes, as well as the existing railroad
crossing at Stevenson Boulevard. The development of the golf course and/or residential portions of the sub areas will contain conventional underground sanitary sewer systems, which will drain towards Stevenson Boulevard to a new lift station. This will pump the sewage either through the new overpass span or beneath the railroad tracks to Stevenson Boulevard. This new system will ultimately connect to the existing systems located within the intersection of Stevenson Boulevard and Cherry Street. New underground public infrastructure is required within Stevenson Boulevard to accomplish this. Sub Area D will require coordination with ACFC&WCD for any utility crossings above or below the existing flood control channel. Sewer connections will be possible at the termination of Mowry Avenue if future design analysis concludes adequate capacity and depth is available. Coordination with USD, Union Pacific Railroad Company, the California Public Utilities Commission, and the City of Newark is required to ensure adequate design and minimal impacts to existing improvements.

- **Water Supply & Service.** Water service for the City of Newark is provided by Alameda County Water District (ACWD). Both Sub Area A and Area 4 are within the existing jurisdictional boundaries of ACWD. In accordance with Senate Bill 610, a Water Supply Assessment was prepared by ACWD for the proposed uses. This assessment concluded that there is adequate water supply was. Existing water mains reside within the adjacent public streets surrounding the Specific Plan area and new underground infrastructure will be constructed within the Sub Areas to serve the proposed uses. These new mains will be separate for domestic and fire water service in one system, and recycled water in a separate system. The recycled water system will be fed from domestic water connections until a future recycled water system is constructed within Cherry Street and/or serve the Specific Plan sub areas. This way the developments will be ready to switch over as recycled water becomes available. Only Area 4 will utilize an existing permitted underground well for irrigation needs until recycled water becomes available.

- **Energy.** Pacific Gas & Electric Company (PG&E) provides energy and natural gas service to the Specific Plan areas. Existing natural gas and electric infrastructure exists within the surrounding public streets. Existing above-ground high-voltage lines also exist within Area 4. New underground primary and secondary infrastructure will be designed with the development of uses within the various sub areas. This infrastructure will be primarily located within the new public street right-of-ways; however, easements may be necessary within private property to provide service to various aspects of the plan. The improvements to the high-voltage lines within Area 4 will need to be designed and completed prior to construction of the new overpass at Stevenson Boulevard.

5. **Landscape Architectural Guidelines**

   a. **Introduction and Landscape Concept.** The landscape concept emphasizes the new urban streetscape for pedestrians, bicycles, and vehicles and places the new neighborhoods in that context. The open spaces and community parks will provide the visual center to this urban village, and are the heart of the landscape uses of the site. The esplanade entry with lighthouse turnaround will create a strong identity for this new community. A strong sense of entry is provided for visitors and residents alike.
The landscape must respond to the significant site climate issues including wind, poor soils, and cooler bayside climate. In order to carry out the landscape goals, plant selections must be resilient and tolerant of these conditions. Massed tree and shrub plantings are used in localized areas to allow for a more usable outdoor space. Dense plantings are proposed along the site perimeters to aid in screening off-site light and views toward the railroad.

Landscape planting is used to reinforce the walkways, vista points and parks, and to help create smaller variations in texture and color as well as low maintenance will be considered in their selection. The individual neighborhoods will be designed to create a sense of individual place as an aid to way-finding and identity for the residents.

Lawn will be used only in spaces where there is an expectation of play use or a need to frame the foreground of site entry features. The grass shall be double dwarf fescue sod to allow for water conservation and ease of long-term maintenance. Groundcover planting and mulch will cover all other soft landscape areas, designed to produce full coverage within 2 years after planting. The majority of the plant material must be low water use, drought tolerant or native. Of special interest is the use of filtering grasses in the linear spaces along greenways and pedestrian/parking areas in grassy swales. The linear treatment allows the lawn areas to be unencumbered by added water in the rainy season so they can be used for active play with less negative impact on the lawn surface.

The irrigation system on the site will be automatic, underground, state of the art systems using the latest water conservation and monitoring technologies available. The project will include a separate irrigation water distribution system to utilize recycled water when it is available from the Alameda County Water District. The irrigation controllers will be “weather based” and have the capability to be radio operated for maintenance ease. Spray irrigation near buildings will be minimized. A five to ten foot zone around the buildings will have drip irrigation to minimize issues related to sprayed water on buildings and finishes. Water features, if any, must use recycled water. Spray irrigation is to be minimized in all areas of the site.

b. Exterior Hardscape Materials. The site is envisioned as being paved with a hierarchy of materials, including gray concrete, beige concrete, interlocking paving stones with patterns in selected areas, decomposed granite which will serve to complement the architectural and landscape architectural palette. Seat walls, feature walls or retaining walls will have finishes that continue building ground plane materials which are most likely to be concrete block or stucco finishes. Other project wide design vocabulary items are described in the illustrations.

c. Plant Palette The plant materials for the new neighborhoods shall be selected from the following palette. In all cases, continuity, simplicity and ease of maintenance are to be considered as prime criteria for any detailed planting plans created for the site. The majority of the plant materials noted below are low water use, drought tolerant or natives. Other plants may be added to this list if approved by the Planning Director as a “minor” amendment to the Specific Plan as long as they meet the goals contained herein.
NEWARK SPECIFIC PLAN
Entry Circle

Pedestrian Crosswalk
Pedestrian Accent Paving
8’ Esplanade Trail
Street Tree
4’ Concrete Walk
Lighthouse Feature

Scale 1”=20’
North

“For Illustrative Purposes Only”
NEWARK SPECIFIC PLAN
Section at Area 4 Entry Drive

“For Illustrative Purposes Only”
NEWARK SPECIFIC PLAN
Section at Alameda County Flood Control Channel
NEWARK SPECIFIC PLAN
EVA Trail Section

"For Illustrative Purposes Only"
NEWARK SPECIFIC PLAN
Section at Cherry Street and Trail Corridor

“For Illustrative Purposes Only”
### TREES

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<thead>
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<td>Strawberry Tree 'Marina'</td>
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<td>Juniper 'Colo-Green'</td>
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### SHRUBS / GRASSES / PERENNIALS

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<td>Evergreen Reed Grass</td>
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<td>Camellia s. cvs</td>
<td>Camellia cultivars as noted</td>
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<td>Chamaerops humilis</td>
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<td>Chondropetalum tectorum</td>
<td>Cape Rush</td>
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<td>Chrysanthemum f. cvs</td>
<td>Marguerite Daisy cultivars</td>
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<td>Lemon Drop Fortnight Lily</td>
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<td>Echinacea purpurea cvs</td>
<td>Cone Flower cultivars</td>
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Escallonia x 'Fradesii'
Escallonia x 'Terri'
Euphorbia x martinii
Grewia occidentalis
Heuchera maxima
Hibiscus syriacus
Helleborus x sternii
Hemerocallis 'Swirling Water'
Hypericum moserianum
Ilex cornuta 'Berries Jubilee'
Ilex crenata 'Sky Pencil'
Ilex vomitoria 'Stokes Dwarf'
Iris sibirica x 'Cultivars'
Laurus 'Saratoga'
Lavandula dentatum
Liriopae muscari
Lysimachia clethroides
Lonicerac 'Lemon Beauty'
Loropetalum chinensis
Myrica california
Miscanthus transmorrisonensis
Muhlenbergia capillaris
Myrsine africana
Nephrolepis cordifolia
Pennisetum s. 'Rubrum'
Phormium 'Platt's Black'
Polystichum munitum 'Wedster'
Pittosporum t. 'Wheelers Dwarf'
Reinwardtia indica
Rhamnus alaternus
Rhaphiolepis i. 'Ballerina'
Rhaphiolepis i. 'Clara'
Festuca idahoensis
Rosa 'Majic Blanket'
Salvia leucanth
Sarcococca ruscifolia
Sedum x 'Autumn Joy'
Spirea j. 'Shirobana'
Stipa gigantea
Viburnum suspensum
Woodwardia fimbriata
Nepeta faassenii
Stachys byzantina
Echium candicans

Escallonia
Dwarf Escallonia
Euphorbiaceae
Lavender Starflower
Coral Bell
Roses of Sharon
Helleborus
Swirling Water
Gold Flower
Chinese Holly
Japanese Holly
Dwarf Ilex
Siberian Iris cultivars
Sweet Bay
French Lavender
Lilac Beauty
Goose Neck Loosestrife
Boxwood Honeysuckle
Loropetalum 'Suzanne'
Pacific Wax Myrtle
Evergreen Miscanthus
Pink Muhley 'Regal Mist'
African Boxwood
Southern Sword Fern
Purple Fountain Grass
'Platt's Black' Flax
Sword Fern
Wheeler's Dwarf Pittosporum
Yellow Flax
Italian Buckthorn
Indian Hawthorn 'Ballerina'
Indian Hawthorn 'Clara'
Festuca
Majic Blanket Rose
Mexican Bush Sage
Sweet Box
Sedum 'Autumn Joy'
Spirea 'Shirobana'
Giant Feather Grass
Sandankwa Viburnum
Giant Chain Fern
Catmint 'Select Blue'
Lamb's Ear
Pride of Madeira
VINES AND GROUNDCOVER

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VEGETATED SWALE PLANTS

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<td>Sisyrinchium bellum</td>
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<td>Epilobium densiflorum</td>
<td>Dense Spike-Primrose</td>
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<tr>
<td>Festuca rubra</td>
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<tr>
<td>Carex pansa</td>
<td>Carex</td>
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<tr>
<td>Mimulu</td>
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6. Standards for the Conservation, Development, and Utilization of Natural Resources.

a. Existing Natural Resources. The majority of Area 4, and the portion of Area 3 where residential construction is proposed, is in active agricultural use, with much of the land regularly disked and graded. Historically, habitats in Area 4 were quite different from the site's current conditions. Most of Area 4 supported extensive coastal salt marshes, but the installation of levees, placement of fill, construction of numerous drainage channels as part of agricultural production, and the construction of salt ponds in the early 1900s immediately to the west of the site has removed or muted tidal influence. Most notably, the construction of the outboard levee that separates the site from Mowry Slough prior to salt production in the late 1800s has allowed the area to be actively farmed for decades. Depending on the yearly precipitation and inputs from groundwater, some areas of the site may not be farmed until late in the season, if at all. Aerial photographs have shown that diskng and planting occur to greater extents in dry years than in wet years, and in some areas planting and the subsequent harvest may be delayed until late summer in wet years.

Thirteen biotic habitats were identified in Areas 3 and 4. These include upland agricultural, agricultural field/seasonal wetland (saline to brackish), agricultural field/seasonal wetland (brackish to fresh), ruderal, developed, aquatic, diked salt marsh, muted tidal salt marsh, freshwater marsh, brackish marsh, seasonal wetland, coastal scrub, and wrecking yard detention basins. Area 3 is dominated by developed, ruderal, and upland agricultural habitats. Agricultural fields variously characterized as uplands or seasonal wetlands (saline to brackish and brackish to fresh) comprise the majority of Area 4. Area 4 is mostly undeveloped, consisting primarily of cultivated fields. However, large portions of Area 4 are too wet for productive agriculture and support extensive marsh habitat exhibiting various
degrees of tidal influence. A large wetland complex is located in the west-central part of Area 4.

The frequent, ongoing nature of disturbance of the upland agricultural habitats in the Specific Plan Areas limits the development of wildlife habitat and the ability of wildlife to nest and burrow within these areas. Raptors such as the red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), northern harrier (*Circus cyaneus*), and barn owl (*Tyto alba*) forage over agricultural habitats, primarily when they contain vegetation. As rain moistens the ground and low vegetation grows, American pipits (*Anthus rubescens*) savannah sparrows, and killdeer (*Charadrius vociferus*) feed in upland fields in small numbers. Mammals such as the western harvest mouse (*Reithrodontomys megalotis*), California vole (*Microtus californicus*), black-tailed hares (*Lepus californicus*) and desert cottontails (*Sylvilagus audubonii*) occur commonly in grasses associated with upland agriculture. California ground squirrels dig burrows in and around such areas, and these burrows provide roosting and nesting sites for burrowing owls (*Athene cunicularia*) which are known to occur within the Project area. Garter snakes (*Thamnophis* spp.), gopher snakes (*Pituophis melanoleucus*), and western fence lizards (*Sceloporus occidentalis*) are examples of reptiles common to habitats in the Specific Plan Areas.

In some parts of the San Francisco Bay area, seasonal wetlands near the bay provide important foraging and loafing habitat for waterbirds (LSA Associates 1989, Goals Project 1999). Waterfowl and some shorebird species forage in wetter areas regardless of the tidal stage in adjacent estuarine areas. Other shorebirds prefer to forage on intertidal mudflats at low tide and use seasonal wetlands as alternate foraging and roosting areas during high tide when their favored foraging habitat is inundated. Long-billed curlews (*Numenius americana*) and killdeer often forage in fields, including cultivated seasonal wetlands. Although seasonal wetlands in their dry condition (e.g., in summer and fall) can be used by roosting birds, the hard nature of the dry substrate and low prey availability during dry conditions make these areas useful to foraging shorebirds primarily when wet in late fall, winter, and early spring.

Although moist-soil conditions likely provide suitable foraging habitat for many waterbirds, the vast majority of observations of these species in the Specific Plan Areas have been in seasonal wetlands that support open water, such as the large wetland complex located in the west-central part of Area 4; such wetlands represent a minority of the seasonal wetlands areas on the site.

Eight special-status plant species were considered to potentially occur on the site: Contra Costa Goldfields (*Lasthenia conjugens*), alkali milk-vetch (*Astragalus tener* var. *tener*), Brittlescale (*Atriplex depressa*), Congdon’s tarplant (*Centromadia parryi* ssp. *congdonii*), Hoover’s button-celery (*Eryngium aristulatum* var. *hooveri*), prostrate vernal pool navarretia (*Navarretia prostrata*), Delta woolly-marbles (*Psilocarphus brevissimus* var. *multiflorus*), and San Joaquin Spearscale (*Atriplex jaquiniana*). While these species are absent from all of the proposed direct impact areas on the Project site, they may occur in natural habitat areas that were not surveyed and that could be indirectly impacted by the project.

Some special-status wildlife species may occur on the Project site only as uncommon to rare visitors, migrants, or transients, or may forage on the site in low numbers while breeding in
adjacent areas, migrating or over wintering. These species include the California least tern (Sterna antillarum browni), black tern (Chlidonias niger), western snowy plover (Charadrius alexandrinus nivosus), bank swallow (Riparia riparia), American white pelican (Pelecanus erythrorhynchos), golden eagle (Aquila chrysaetos), Vaux’s swift (Chaetura vauxi), California yellow warbler (Dendroica petechia brewsteri), grasshopper sparrow (Ammodramus savannarum), western red bat (Lasiurus blossevillii), and Townsend’s big-eared bat (Corynorhinus townsendii).

Other special-status wildlife species may or are known to occur on the site more regularly and some may breed on the site. These include northern harrier (Circus cyaneus), white-tailed kite (Elanus caerules), peregrine falcon (Falco peregrinus), burrowing owl (Athene cunicularia), loggerhead shrike (Lanius ludovicianus), Alameda song sparrow (Melospiza melodia pusillula), Bryant’s savannah sparrow (Passerculus sandwichensis alaudinus), San Francisco common yellowthroat (Geothlypis trichas sinuosa), tricolored blackbird (Agelaius tricolor), pallid bat (Antrozous pallidus), salt marsh wandering shrew (Sorex vagrans halicoetes), and salt marsh harvest mouse (Reithrodontomys raviventris). Limited areas of potential habitat for the vernal pool tadpole shrimp (Lepidurus packardi), California tiger salamander (Ambystoma californiens) occur in Area 4, however, neither species has been found on or present on the site. California clapper rail (Rallus longirostris obsoletus) and California black rail (Laterallus jamaicensis coturniculus) may occur in the adjacent Mowry Slough. A Pacific harbor seal (Phoca vitulina) pupping site is located along lower Mowry Slough, approximately 2 miles (mi) (4 stream mi) downstream from the Specific Plan areas. The Yuma myotis (Myotis yumanensis), while not on the California Department of Fish and Game’s list of California species of special concern, is relatively rare in bayside areas in the South Bay and could occur in Area 4.

The more uncommon wetland and aquatic habitats provide habitats for uncommon and rare species in addition to some more common species. For example, the diked salt marsh provides high-quality habitat for the federally endangered salt marsh harvest mouse and possibly the salt marsh wandering shrew. Birds also nest within this habitat such as the song sparrow (Melospiza melodia), San Francisco common yellowthroat, Bryant’s savannah sparrow, western meadowlark (Sturnella neglecta), and red-winged blackbird (Agelaius phoeniceus), and possibly the northern harrier. Freshwater marsh emergent vegetation on the site supports breeding birds such as San Francisco common yellowthroats, marsh wrens (Cistothorus palustris), song sparrows (Melospiza melodia), and red-winged blackbirds.

b. Environmental Measures

Goal: maintain, protect and enhance the planning areas’ natural biological resources particularly sensitive habitats and associated rare plants and animals while integrating development and human uses.

• Sensitive Habitat Areas
Given the declines in regional availability of seasonal wetland habitat around the South Bay, wetland, marsh, and aquatic habitats that occur in Specific Plan Area 4 are valuable habitat types. Seasonal wetlands, even in agricultural areas, have been increasingly lost to development in the South Bay (LSA Associates 1989, Goals Project 1999). Open, moist field habitat that was historically used as alternate foraging habitat for shorebirds
during high tides (when favored intertidal foraging habitat was inundated) has also declined. Although salt ponds currently serve as surrogates for these seasonal wetlands from the perspective of high-tide use by shorebirds, planned restoration of at least some salt ponds in the South Bay by the South Bay Salt Ponds Restoration Project (which does not include the Newark salt ponds closest to the site) may reduce the extent of such salt ponds, albeit while enhancing other ponds for shorebird use.

In addition, diked salt marsh, muted tidal salt marsh, freshwater marsh, and brackish marsh, of the kind found within Area 4, are significant as habitat for species listed as threatened or endangered under federal and state laws, like the California clapper rail and the salt marsh harvest mouse.

While the City of Newark General Plan has identified development that is projected to occur within Area 4, this area has also been identified for its ecological value by regional planning efforts. The southern and western portions of Area 4 were included in the approved 1990 Refuge Boundary Expansion area of the Don Edwards San Francisco Bay National Wildlife Refuge (SFBNWR), indicating that these lands were pre-approved for addition to the Refuge in the future. The Baylands Habitat Goals Project (1999) includes recommendations to “protect and enhance the tidal marsh/upland transition at the upper end of Mowry Slough and in the area of the [former] Pintail Duck Club.” Being situated between existing salt production ponds that were formerly tidal wetlands and vernal pool habitat east of the site, Area 4 provides one of few areas in the South Bay with upland habitat transitioning between tidal wetlands and vernal pools, and the Goals Project identified the site’s potential value in providing upland transition zones adjacent to tidal wetlands. Upland habitats provide a buffer or transition area upslope from wetlands and marshes. Where such upland transition zones are located adjacent to tidal marsh, they provide important refugia for tidal marsh species during high tides that inundate most of the marsh plain. Even in nontidal areas, such upland habitat can provide refugia for wetland species during periods of flooding.

The City of Newark commissioned the ranking of the value of various wetland, aquatic, and upland habitats on the site based on the hydrology, floristic composition, level of on-going disturbance through agricultural use, and observed levels of use by wildlife species in Specific Plan Area 4 (H. T. Harvey & Associates 2006a). These rankings were used to guide decisions regarding where the golf course and residential areas should be planned, so as to avoid direct impacts to the highest-quality habitats. Most of the seasonal wetlands, aquatic habitats, and muted tidal salt marsh that will be directly filled by this Project were determined to be of poor or marginal quality, primarily due to intensive agricultural disturbance and the resulting effects on plant communities and wildlife use.

In addition to wetland, marsh, and aquatic habitats that will be filled directly, indirect impacts to wetlands in several areas may be great enough so as to result in the functional loss of these habitats. Some wetland/aquatic habitats that will not be filled may still be functionally lost due to the level of disturbance associated with development activities that is expected to occur, as well as the potentially small or isolated nature of remaining features (which allows no buffer from such disturbance). Some species can no longer subsist in these smaller fragments, the fragments may be heavily influenced by surrounding stressors, or species may not reproduce successfully
without exchange with other populations. If remaining fragments of undeveloped habitat are isolated from larger areas of contiguous habitat, the remaining habitats are expected to have lower biological values than those prevailing before development. Therefore, large contiguous habitat areas are important and isolation and fragmentation can severely affect wildlife and, in some cases, plant populations in preserved or remnant habitat areas.

Wetland, marsh and aquatic habitats are recognized as rare and declining by state and federal agencies charged with protection of natural resources. Due to the value of these sensitive habitats, it is important that this Specific Plan incorporate policies to protect and enhance these habitats.

Policy 6-1: Disturbance to and loss of all wetland and aquatic habitats should be avoided to the maximum extent feasible.

Policy 6-2: Wetland habitat should be created or enhance within non-development areas of Specific Plan Area 4 to offset functional or actual loss of existing sensitive wetland and aquatic habitat to the maximum extent feasible. These created and enhance habitat areas should be large, contiguous matrices of wetland and upland that maintain or increase habitat value and provide habitat opportunities for rare plant and wildlife species and that, by adjoin existing or preserved habitats adjacent to Area 4, may be functionally larger.

Policy 6-3: Development of the golf course should contain as much natural habitat as is feasible, such as unmaintained native grassland areas rather than turf and native trees and other vegetation where appropriate.

• Hydrology Supporting Natural Resources

There are three primary sources of hydrology acting on the site, including incidental rainfall, groundwater table fed by springs, and lateral seeps. Area 3 is primarily affected by incidental rainfall. Some areas of Area 4 are also mainly influenced by surface precipitation which flows to slight depressions, including the areas within Area 4 proposed for residential development. The Specific Plan area is relatively flat, with little elevation change across large portions of the property. Small gradients in elevation (less than 1 ft difference between upland areas and potential wetland areas) at this site result in subtle depressions. The landscape surrounding these slight depressions then becomes the contributing watershed to these potential wetlands. However, subsurface flow within disked soils also allows water to move generally towards the pump in draining the site slowly.

Groundwater does not appear to influence all areas of Area 4. Rather, the localized groundwater occurring within several perennial wetlands/ponds located in the western portion of Area 4 allows water in the top several inches of the soil to move laterally away from the ponds into the adjacent agricultural fields. The source for the groundwater appears to be a large aquifer that is recharged far upslope by the Fremont Percolation Ponds (which contribute to the Niles Cone Groundwater Basin which includes three aquifers: the deep aquifer, the Fremont aquifer, and the Newark aquifer). Recharge of the seasonal wetland and marsh habitats that are part of the large wetland complex located in the west-central part of Area 4 is from groundwater seeps and
occurs in mid-to late-summer. The presence of surface and subsurface water deriving from underground seeps appears to influence seasonal wetland habitat within Area 4 east and south of the proposed golf course. The remaining areas of Area 4 are influenced by a combination of these hydrologic features.

The portion of Area 3 where development is proposed as part of this Project drains westward to ACFCWCD Line D. Portions of Area 4 northwest of ACFCWCD Line D drain south/southwestward to a one-way outlet culvert on Line B near its confluence with Line D. This culvert allows water to drain from the site but does not allow water from Line B to enter the site. Lines D and N receive no runoff from Area 4. Portions of Area 4 southeast of ACFCWCD Line D drain generally to the south/southeast through ditches that have been constructed on the site, including a large ditch that surrounds the southwestern portion of the site, to a large pump which continually pumps water from the site into Mowry Slough. Due to the relative ground within Area 4 and water levels within Mowry Slough and the Bay, pumping will be required even to preserve natural wetland habitats to move water into Mowry Slough.

The exiting hydrology of Area 4, along with topography, determines the locations and extent of natural wetland or aquatic habitats. Currently, wetland habitat on the site is influenced by groundwater, seeps, and incidental rainfall. A change in the hydrology of the site, whether to increase or decrease the amount of water reaching wetland, marsh, and aquatic habitats, will affect the persistence and quality of these sensitive habitat types. Typically, development affects hydrology by 1) increasing impervious surfaces and thereby increasing the rate and amount of runoff entering undeveloped areas, 2) decreasing the amount of water entering undeveloped areas with the addition of features that retain or use additional water through ponding or vegetation, and 3) adding nuisance flows into undeveloped areas during the dry summer months from landscape watering. In addition, runoff from development areas, including golf courses can impact the water quality in natural wetland and aquatic habitats on site and, subsequently, into Mowry Slough and the San Francisco Bay due to contamination from landscape chemicals, roadway contaminants, and sediments. After completion of construction, stormwater runoff from the Project’s developed areas may contain eroded earthen materials or dissolved chemicals (from debris, landscaping fertilizers and pesticides, and vehicular traffic debris, including abraded tire and brake lining materials) that could affect the surrounding aquatic habitats through siltation, erosion, or contamination. In addition, siltation within these habitats may change the existing vegetation community present and/or eliminate any previously undisturbed habitat that could provide suitable habitat for special-status plant species in the future. In addition, if improperly conducted, remediation of any contamination in the auto wrecking yards could allow contaminants to leach into adjacent natural habitats from the auto wrecking yard area clean-up. These hydrologic alterations could affect the wetland and marsh habitats that will not be directly filled during site development and those preserved and enhanced in response to Policy 6-1.

These combined effects of development on the amount, location, velocity, and timing of water movement on the site would alter the character, quality, and distribution of natural habitats surrounding development features. Any reduction in the amount of water entering seasonal wetland or marsh habitats (i.e., through diversion of stormwater runoff) could reduce the hydroperiod and ponding depth of these wetlands,
altering their functions and values for plants and animals. Additional water moving into natural habitat may result in seasonal wetland habitat becoming perennial wetland habitat after Project implementation or brackish and salt water marshes becoming fresher. In addition, this greater amount of water flow may be concentrated in fewer areas and/or smaller areas, causing erosion and channelization resulting in the creation of perennial aquatic habitat in channels in what is currently upland habitat or seasonal wetland habitat. Contaminants from development could also reduce water quality significantly.

These habitat effects could impact special-status species such as the salt marsh harvest mouse, salt marsh wandering shrew, Alameda song sparrow, Bryant’s savannah sparrow, and San Francisco common yellowthroat. In addition, if special-status plants such as the alkali milk-vetch, Congdon’s tarplant, Delta woolly-marbles, Hoover’s button-celery, prostrate vernal pool navarretia, brittlescale, San Joaquin spearscale, and Contra Costa goldfields are present in areas of marsh, changes in hydrology could affect these species as well.

Policy 6-4: Maintain site hydrology and water quality in remaining or preserved natural habitats through incorporation of design features to duplicate existing hydrologic conditions and maintain or improve the current quality of water leaving the site. Such features may include the use of grassy swales to treat runoff, capture contaminants and allow water to infiltrate into the soil; surface materials to allow for infiltration on individual residential (private) properties (including permeable driveway material and individual detention features); water conservation; xeric (preferably native) landscaping; properly sized conveyance structures; distribution of runoff (not narrowly focused); and the retention of water (particularly off-season nuisance flows) within the development footprint.

Policy 6-5: To maintain hydrology and water quality as currently exists in natural habitat areas, development of the golf course should use state of the art management methods such as a computerized irrigation system connected to an on-site weather station to limit watering to the exact needs of the course, sprinkler head designs to ensure a very even distribution of water to reduce water use and runoff, unmaintained native grasses in the outer roughs, designated irrigated and non-irrigated areas, retention of runoff (particularly off-season) within the golf course, accurate application of fertilizer to that required to eliminate contaminated runoff and retention of nuisance or off-season flows within the development area.

• Wildlife Use and Wildlife Movement

Areas 3 and 4 are the largest remaining tracts of relatively undeveloped land in Newark. Area 4 in particular provides habitat for wildlife. Upland portions of the site support wildlife species that are relatively common throughout the South Bay region. The frequent, ongoing nature of disturbance of the upland agricultural habitats on the site limits the development of wildlife habitat and the ability of wildlife to nest and burrow within these areas.

The more uncommon wetland and aquatic habitats provide habitats for uncommon and rare species in addition to some more common species. For example, the diked salt
marsh provides high-quality habitat for the federally endangered salt marsh harvest mouse and possibly the salt marsh wandering shrew. Birds also nest within this habitat such as the song sparrow (Melospiza melodia), San Francisco common yellowthroat, Bryant’s savannah sparrow, western meadowlark (Sturnella neglecta), and red-winged blackbird (Agelaius phoeniceus), and possibly the northern harrier. Freshwater marsh emergent vegetation on the site supports breeding birds such as San Francisco common yellowthroats, marsh wrens (Cistothorus palustris), song sparrows (Melospiza melodia), and red-winged blackbirds.

In parts of the San Francisco Bay area, seasonal wetlands near the bay provide important foraging and loafing habitat for waterbirds (LSA Associates 1989, Goals Project 1999). Although moist-soil conditions in the existing agricultural wetlands likely provide suitable foraging habitat for waterbirds, the vast majority of observations of waterbirds have been in seasonal wetlands that support open water; such wetlands are present in the large wetland complex is located in the west-central part of Area 4.

In some areas, the upland habitats on the site provide a buffer or transition area upslope from wetlands and marshes. Where such upland transition zones are located adjacent to tidal marsh, they provide important refugia for tidal marsh species during high tides that inundate most of the marsh plain. Even in nontidal areas, such upland habitat can provide refugia for wetland species during periods of flooding.

As described previously (see Existing Natural Resources above), several special-status wildlife species may occur on the Project site as occasional visitors, migrants, or transients but do not breed on the site. Other special-status species could potentially breed on or adjacent to the site such as the northern harrier, white-tailed kite, loggerhead shrike, Alameda song sparrow, Bryant’s savannah sparrow, and San Francisco common yellowthroat. Northern harriers may nest on the ground in the diked salt marsh in Area 4 and along the adjacent Mowry Slough. The Alameda song sparrow, Bryant’s savannah sparrow, and San Francisco common yellowthroat nest primarily in marsh habitat. Several pairs of burrowing owls have also been recorded breeding in ruderal habitats on the Project site, both along the sides of levees and in vacant lots. Peregrine falcons can nest on electrical transmission towers in Area 4 and forage for waterbirds in seasonal wetland and marsh habitats on the site and on salt ponds nearby. The diked salt marsh provides high-quality habitat salt marsh harvest mouse and possibly the salt marsh wandering shrew. Pallid bats and Yuma myotis might roost in one or more of several buildings or trees on the site.

The ACFCWCD channels that flow into Mowry Slough, and Mowry Slough itself, represent the primary aquatic movement pathways on and in the vicinity of the Project site. Development of the Specific Plan Areas will not disrupt these pathways, and thus will have little effect on movement by aquatic species. Although Area 4 supports important aquatic habitats, particularly in the large wetland complex located in the west-central portion, these habitats have little connectivity to off-site aquatic habitats (from the perspective of aquatic species movements) since water southeast of ACFCWCD Line D has to be pumped into Mowry Slough and water northwest of Line D enters Mowry Slough through a one-way culvert.
While Specific Plan Areas 3 and 4 are the largest remaining tracts of relatively undeveloped land in Newark and natural habitats are available, the Specific Plan areas are surrounded by development to the north and east and salt production ponds to the northwest and west. Salt ponds and urban development prevent any substantive movement of terrestrial wildlife such as mammals, reptiles, and amphibians to or from the northwest (i.e., in the direction of the Refuge headquarters and Coyote Hills Regional Park). Likewise, extensive urban development to the north and east prevent movement of these species between the site and the undeveloped hills nearly 5 mi to the east. The only connectivity to open, upland wildlife habitat occurs to the southeast. However, the upland habitat areas southeast of the site are limited in size and isolated from extensive open space habitat (e.g., east of Interstate 880) by urban development. As a result, any movement by mammals, reptiles, and amphibians through the Project site would facilitate exchange of individuals or genes only locally, along the immediate edge of the Bay in the Fremont-Newark area; however, this movement is locally important. Within the immediate Specific Plan Areas, the footprint of the development will limit the movement of animals within the site, but wildlife will still be able to move through undeveloped areas and, to some extent, through the golf course. Development in the northeastern corner of Area 3 will have little effect on wildlife movement. The proposed residential area footprint will reduce the available connected habitat areas and constrict the corridors between them. The golf course, should it be built, will allow wildlife to traverse most of the northern portion of Area 4 to the extent they are not inhibited by human activity. However, as under existing conditions, the ACFCWCD Line D will continue to impede terrestrial wildlife, and northwest/southeast wildlife movement must be at levee connection points.

Policy 6-6: Development of residential and golf course areas should be configured to optimize habitat areas (e.g., contiguous and large) for wildlife in remaining or preserved wetlands to provide needed habitat elements; limit disturbance from residences, the golf course, and recreational activities (e.g., hiking or dog walking along levees); avoid, to the extent feasible, or replace and enhance habitat for endangered species habitat lost; and allow for adequate movement for wildlife species within Area 4 with particular attention paid to waterbirds and special-status species found in the area: burrowing owls, peregrine falcons, tricolored blackbirds (colonies), salt marsh harvest mice, salt marsh wandering shrews, pallid bats, and Yuma bats and breeding northern harriers, Alameda song sparrows, Bryant’s savannah sparrows, and San Francisco common yellowthroats.

• Construction
As mentioned previously, there is habitat within Area 4 that should be avoided when planning development. This habitat itself, plants and wildlife, including Special-status Species, that reside in that habitat can be detrimentally affected during construction. For example, if burrowing owls are using burrows on or immediately adjacent to the site when Project construction commences, construction activities could result in the mortality or injury of individual owls in burrows, or cause the abandonment of active nests.

Grading could result in mobilization of dust and introduction of silt and contaminants into aquatic habitats. Due to the presence of at least marginal-quality nesting habitat
for tricolored blackbirds and this species’ tendency to nest in large colonies, there is some potential for construction related impacts to nesting tricolored blackbirds too. The endangered salt marsh harvest mouse is known to occur in the diked salt marsh habitat in the large wetland complex located in the west-central portion of Area 4 (Shellhammer et al. 1985). Tidal salt marsh along Mowry Slough adjacent to the site and the muted tidal salt marsh in the northwestern part of Area 4 also provide suitable habitat for this species, and salt marsh harvest mice may also occur in the agricultural field/seasonal brackish marsh adjacent to the diked salt marsh habitat. Salt marsh wandering shrew may also be present in these habitats.

Water quality affects during construction can also affect any of these habitats or species in remaining or preserved habitats. Construction may result in temporary impacts to water quality in several ways. Soil disturbance during soil stockpiling and grading can result in mobilization of dust that coats plants (possibly including special-status species) in areas that are not directly impacted, potentially adversely affecting their health. Soil disturbance can also result in soil erosion, transport, and siltation of wetlands that are not intended to be filled. Contamination of aquatic and wetland habitats can occur as a result of fuel leaks in construction equipment, abrasion of materials used in construction, and inputs of debris and runoff of concrete byproducts or slurry. Construction in and near seasonal wetland habitat, salt marsh habitat, any of the existing agricultural ditches present on the site, or the ACFCWCD channels could have a substantial adverse effect on water quality due to increased turbidity and siltation from soil, if ground-disturbing activities occur during the wet season, or if soil is allowed to enter these habitats, or from chemical, particulate or debris contaminants. Soil or contaminants could also potentially be transported to aquatic habitats from activities in upland habitats a considerable distance away from these habitats, for example, in storm runoff or accidental discharge of water. There is also the potential to add to construction-period water quality degradation during removal and clean-up of the auto wrecking yards in the northwest portion of Area 4. Chemicals, particularly petroleum-based chemicals, and particulates, such as asbestos brake lining materials, typically contaminate auto wrecking yards. If this cleanup is improperly conducted, these contaminants can leach into adjacent natural habitats during removal of the yards and construction of the golf course in the area. Degradation of water quality on and downstream from the site resulting from construction could adversely affect prey availability, foraging conditions, or the health of a variety of wildlife species, including harbor seals and fish within Mowry Slough; aquatic invertebrates that support foraging and breeding waterbirds in the sloughs, channels or wetland habitats; and terrestrial wildlife species including rare salt marsh associated species as well as common species that use wetland habitat for drinking water, foraging, and refugia.

Grading or importation of fill material can cause the spread of invasive non-native plant species. Of particular concern are species such as fennel (Foeniculum vulgare), pampas grass (Cortaderia selloana), perennial pepperweed (Lepidium latifolium), and smallflower tamarisk (Tamarix parviflora). Several non-native, invasive species occur on the site, including perennial pepperweed, black mustard, and prickly ox-tongue. Invasive species, particularly fast-growing herbaceous invaders, are often disturbance-adapted, and soil disturbance of the type that will occur during the construction is often followed by an aggressive invasion of the disturbed area by these species.
Under existing conditions, there are small populations of many invasive species throughout the Specific Plan Areas; however, ground disturbance associated with construction would create vast new areas suitable for recruitment of these non-native species (e.g., along the fill embankments), many of which form dense, monotypic stands, eliminating any natural habitat that the area previously supported. Expansion of these invasive plant populations on the site will also increase the seed bank on the site allowing spread to unimpacted natural habitats on the site. While the areas of the site that are in agricultural production contain some of these non-native, invasive plant species, the most damage would be caused by an increase in species that can have a severe ecological impact (fennel, pampas grass, perennial pepperweed, and smallflower tamarisk). Invasion by these non-native species will degrade the functions and values of preserved natural habitat for native plants and wildlife species and reduce the potential for native species to use the landscaped areas within the new development. In Area 3 and 4, fill material for the proposed residential construction may contain seed from non-native plant species not already found on the site, and site grading will likely spread non-native, invasive plant species imported in fill or already present on the site. In Area 4, there are already populations of fennel, pampas grass, perennial pepperweed, and small flower tamarisk within areas proposed for development that may be spread during construction, potentially resulting in substantial impacts to remaining natural habitats. Under existing conditions in Area 4, the levee banks are dominated by black mustard, forming dense thickets that are sprayed periodically with herbicide

**Policy 6-7:** Temporary disturbance to all wetland and aquatic habitat should be avoided to the maximum extent feasible during construction activities using measures such as demarcation of construction areas with Environmentally Sensitive Area fencing

**Policy 6-8:** Minimized construction related impact on rare, threatened, endangered or other special-status species particularly in natural, created or enhanced habitat areas remaining or preserved on site such as burrowing owls, salt marsh harvest mice, salt marsh wandering shrews, pallid and Yuma bats, and nesting northern harriers, peregrine falcons, Alameda song sparrows, Bryant’s savannah sparrows, San Francisco common yellowthroats, and tricolored blackbird colonies. Measures may include conducting pre-construction/pre-disturbance surveys, establishing buffer zones, avoiding habitat, creating alternate habitat, salvaging individuals, and during the breeding season: avoiding construction activities, excluding individuals from construction areas, removal of vegetation.

**Policy 6-9:** Minimize construction related impact water quality degradation in natural, created or enhanced habitat areas remaining or preserved on site using measures such as incorporating best management practices, minimizing soil disturbance adjacent to wetland and marsh habitat, suppressing dust during construction, and avoiding contamination of adjacent natural habitats during environmental cleanup of the auto wrecking yards.

**Policy 6-10:** The City of Newark shall require design and implementation of and must review and approval an Invasive Plant Species Management Plan prior to grading or importation of fill material as part of any proposed development in Specific Plan Areas 3 and 4 to reduce the potential establishment or spread of non-
native, invasive weed populations as a result of development activities. This management plan will outline methods to control the existing populations of non-native, invasive weed species that are not a severe ecological threat and to remove those weed species present that pose a severe ecological threat from the accessible portion of the site to prevent the spread of their seed during and after construction and to prevent the invasion of graded area by invasive species.

- **Human Disturbance**

After construction has been completed, residential and golf course development will be in close proximity to seasonal wetland, marsh, and aquatic habitats in Area 4. To the extent that these sensitive habitats currently support waterbirds and special-status species, it is likely that proximity to developed areas will result in diminished wildlife use after construction is completed. This decrease in habitat value of the wetlands that are not proposed to be directly impacted may occur for a variety of reasons. Noise, movement of people, domestic animals, and vehicles within the developed area; artificial lighting, and encroachment of people and domestic animals from the developed area into the natural area have the potential to render portions of the “preserved” wetlands unusable by wildlife, at least in areas near the source of disturbance while the disturbance is ongoing. In the absence of such sources of disturbance, wildlife that might otherwise use the site’s wetland and aquatic habitats may avoid areas in close proximity to developed areas due to concerns about sight distance and predation risk (e.g., buildings and fill may reduce the distance at which foraging animals can detect predators).

Even if their habitat is not directly impacted, isolation of habitat for species such as the salt marsh harvest mouse and salt marsh wandering shrew resulting from development could adversely affect these species as well. Burrowing owls will be subject to disturbance of nesting and roosting birds by golfers, people walking along levees, and domestic animals, and possible predation by domestic animals and urban-adapted nuisance species. Suitable roosting and nesting habitat for these owls would most likely occur along levees or at the edges of the golf course, therefore, areas occupied by any owls that remain in Area 4 would be accessible to humans and other animals and would thus be subject to recreational disturbance and predation and harassment by pets and urban-adapted predators.

Domestic pets, cats in particular, will stray from the residential areas in both Areas 3 and 4 and may depredate salt marsh harvest mice or salt marsh wandering shrews and breeding special-status bird or their nests. Non-native mammals such as house mice and black and Norway rats, as well as urban-adapted natives such as raccoons, are likely to increase on the Project site following development. These species may compete with or prey on salt marsh harvest mice or salt marsh wandering shrews. These species may compete with or prey on some of these special-status species.

Recreational activities in close proximity to sensitive habitats, etc have the potential to adversely affect sensitive habitats and species. Residential development will increase the number of people in this part of Newark who might use the golf course in Area 4 or who might walk or bike on levees adjacent to higher-quality habitats in Area 4. Thus, development in Area 3 and 4 will likely result in an increase in recreational disturbance of sensitive habitats and species in Area 4.
Due to the close proximity of the areas of potential recreational use (formal recreation on the golf course and informal recreation on levees) to sensitive habitats that are known to support special-status species and large numbers of foraging and roosting waterbirds (in the large wetland complex located in the west-central portion of Area 4), recreational activities have the potential to impact sensitive habitats and species. Two types of recreational activities are anticipated to occur, or increase in frequency and intensity, near sensitive habitats in Area 4 as a result of the Project: golfing on the new golf course and recreational use of the levees along the ACFCWCD channels and along Mowry Slough.

Because the golf course abuts sensitive habitats such as wetlands, marsh, and aquatic habitats containing sensitive species, golfers are likely to disturb these habitats and species. Golfers may enter these habitats looking for stray balls, and the noise and human activity associated with golfing may disturb sensitive species in adjacent habitats or reduce the use of adjacent habitats by these species. Use of a golf cart bridge over the wetlands northwest of ACFCWCD Line D to connect separate portions of the golf course will result in disturbance of wetland-associated wildlife species. These activities may result in degradation of wetland, marsh, and aquatic habitats; crushing of special-status plants, salt marsh harvest mice, and salt marsh wandering shrews; disturbance of nesting birds, including special-status species such as northern harriers, burrowing owls, San Francisco common yellowthroats, and Alameda song sparrows; and disturbance of nesting, foraging, and roosting waterfowl, shorebirds, and other species.

Although there are no official trails, people currently walk along the levees that line the ACFCWCD channels and along the levee that follows the eastern side of Mowry Slough infrequently and in small numbers, but with the residential development in Areas 3 and 4 and the presence of the golf course, more visitors to these levees are anticipated. Levee users may enter sensitive habitats, and the noise and human activity associated with levee use may disturb sensitive species in adjacent habitats or reduce the use of adjacent habitats by these species. These activities may result in degradation of wetland, marsh, and aquatic habitats; crushing of special-status plants, salt marsh harvest mice, and salt marsh wandering shrews; disturbance of nesting birds, including special-status species such as northern harriers, burrowing owls, San Francisco common yellowthroats, and Alameda song sparrows; and disturbance of nesting, foraging, and roosting waterfowl, shorebirds, and other species. Levee users may also bring dogs to these areas, and the dogs have the potential to harass or even depredate bird and mammal species in the sensitive habitats along these levee. Development of the area is likely to be followed by formalizing levees as designated trails, increasing use and disturbance.

Policy 6-11: The design of the golf course should minimize, to the extent practicable, disturbance by golfers of adjacent sensitive natural resources such as sensitive habitats, vegetation wildlife, and rare plant or animals with such measures as having high-use areas such as tees and greens set back from the edge of the golf course, broad rough/out-of-bounds areas along the interface between the golf course and sensitive habitats, “out of bounds” areas clearly marked, and focused lighting that does not extend into natural or habitat areas.
**Policy 6-12:** Minimize disturbance from residential and recreational uses including refraining from developing recreational use areas near sensitive natural resources, educating the public about the importance of preserving the ecological integrity of the adjacent natural areas, instructing recreational users to stay on the levee tops out of sensitive habitats and keep dogs on leashes, developing signage along the ACFCWCD levees and along Mowry Slough to educate users the ecological value of adjacent wetland areas and protection measures, avoiding artificial light pollution of habitat areas, and setting aside habitat areas sufficiently large that undisturbed areas are available to wildlife.

7. Implementations Programs and Measures.

   a. Development Phasing. Both Area 3 and Area 4 will be developed independently of each other. Area 4 will not be developed until the bridge over the railroad is constructed. Phasing within each Area will be based on the provision of appropriate infrastructure.

   b. Public/Private Financing. The residential portions of the plan will be solely financed by private funds. Any Public facilities will be funded with public money. The various developers within areas of the plan will work closely with the City to bring public improvements on-line at the earliest possible date.

   c. Allocation of Specific Plan Costs. Costs will be proportionately allocated to the property owners with Sub Areas A, B, and C based on their ownership of developable land within those Areas.

   d. Affordable Housing Implementation Strategy. The Specific Plan will comply with the affordable housing elements required by Chapter 17.18 of Newark’s Municipal Code. The Plan will provide for the development and maintenance of 15% of the total number of dwelling units within the residential development as inclusionary units. In the alternative, the City will receive an in-lieu fee for the affordable housing requirement.


      • General Plan Amendment – the General Plan will be amended simultaneously with the adoption of this Plan.

      • Zoning Changes – the zoning changes will occur simultaneously with the adoption of this Plan.

      • CUPs – the requisite CUPs will be granted simultaneously with the adoption of this Plan.

      • Development Agreement – the Development Agreement will be entered into simultaneously with this Plan.

      • Tentative Map – the tentative map will be approved at a later date.

   f. Review and Approval Process. Tentative and Final maps will go through the City’s normal subdivision procedure with ultimate City Council approval required. Subdivisions conforming to the Specific Plan shall be approved and shall be deemed exempt from CEQA. See Public Resources Code § 21083.3 and Government Code § 65457. Any major changes in Land Use distribution or increase in intensity of development are not anticipated in the
Specific Plan and will be processed as major amendments to the Specific Plan, and total cost allocation for such change will be borne solely by the entity requesting such change.

The Planning Director will have the authority to approve all minor changes to the Specific Plan within the context and guidelines contained within this document. All Site Plan and Architectural approvals will be made by Planning Director based solely on the standards and guidelines enumerated in this document. The minimum materials submitted to the Planning Director for review and approval shall be:

- Precise Site Plan at 1” = 40” – 00” scale
- Floor Plans and Elevations at ½” = 1’ – 00” scale
- Appropriate Engineering drawings
- Preliminary Landscape Plan at 1” = 40’ – 00” scale with larger scale typicals.

Upon receipt of a completed submittal package, the Planning Director will act on the submittal within 30 days.

8. Relationship to the General Plan

a. **Area 3, Sub Area A.** Sub Area A is designated as Special Industrial under the General Plan, and will be amended to a designation of Low Density Residential. As discussed above in section 2(b), Area 3, Sub Area A is currently zoned as MT-1 High Technology Park and will be rezoned R Residential.

b. **Area 4, Sub Area B.** Sub Area B is designated as Low Density Residential under the General Plan, which provides for predominantly single-family homes. Consequently, the proposed uses are compatible. As discussed above in section 2(b), Sub Area B is currently zoned as A Agricultural and will be rezoned R Residential.

c. **Area 4, Sub Area C.** Sub Area C is designated as Low Density Residential under the General Plan, which provides for predominantly single-family homes. Consequently, the proposed uses are compatible. As discussed above in section 2(b), Sub Area C is currently zoned as A Agricultural and will be rezoned R Residential. However, a conditional use permit must be obtained to allow the construction of a golf course.

d. **Area 4, Sub Area D.** Sub Area D is designated as Low Density Residential under the General Plan, which provides for predominantly single-family homes. Consequently, the proposed uses are compatible. As discussed above in section 2(b), Sub Area D is currently zoned as A Agricultural and will remain zoned A Agricultural. However, a conditional use permit must be obtained to allow construction of a golf course or another recreational use.

e. **Area 4, Sub Areas E and Area 3, Sub Area F.** These areas will remain the same, therefore they will remain consistent with the General Plan.

f. **Conflicts with the General Plan and the Newark Municipal Code.** There are no Specific Plan conflicts with the General Plan.
g. **Consistency with other City Policies and Programs.** The Specific Plan significantly furthers two of Newark’s Major Community Goals, as they are stated in the General Plan:

- **Goal 1:** *Maintain a desirable quality of life in the community through preservation of the small town neighborhood atmosphere and the promotion of balanced land use that takes into account the need for economic diversity and future financial well being of the city. This development will not result in undue burdens upon the City. The Specific Plan makes accommodations for any resultant increase in traffic and utilities. The development will also be of the highest quality and complement existing adjacent uses, as discussed above in section 2(b).*

- **Goal 2:** *Promote high quality development that establishes the City’s character as distinctive from that of other cities in the Bay area. The planned development will be of the highest quality and will not have significant impacts on adjacent properties. In fact, the planned uses complement the adjacent uses which include residential and Ohlone College.*
APPENDIX

LITERATURE CITED


