IMPROVEMENT PLANS

PROJECT NAME:_____

LOT NO._____, PARCEL MAP/TRACT NO.____

IMPROVEMENT PLANS GENERAL NOTES

GENERAL

1. All work and materials shall comply with standard specifications, construction details, and standard drawings (listed on this sheet) of the City of Milpitas available in the City Engineer's office. It is the responsibility of the contractor to obtain permits necessary to perform the improvements in these plans from the appropriate agencies and to comply with the agencies' requirements. All plans shall be prepared on City's Improvements Title Block. The contractor must comply with all applicable national, state and local laws.
2. Plans used for construction of public facilities purposes must be signed by the City Engineer or his representative. Any subsequent changes shall be approved by the City Engineer or his representative prior to their construction.
3. The official copy of these plans are on file in the office of the City Engineer in Milpitas.
4. This plan is subject to review and subsequent approval in the event the work has not commenced within six (6) months of the date of plan approval.
5. All utilities and improvements that become damaged during construction shall be completely restored to the satisfaction of the City Engineer.
6. A $2,000 deposit shall be made to the City of Milpitas and a construction water meter shall be obtained for incidental water used during grading and roadway construction. Water meter(s) shall be installed for incidental water use during building (s) construction and pressure test of water line within the building (s).
7. The contractor shall notify Underground Service Alert (U.S.A.) at (800) 642–2444 48 hours prior to any construction activities, and obtain a reference number.
8. Prior to any construction or installation of public facilities, the developer's engineer shall arrange a pre–construction conference between the contractors and the City Public Works Inspector. This shall take place a minimum of 7 days prior to the scheduled start of work. At the conference, the developer's engineer shall present the Public Works Inspector with a certified copy of a material list and specifications for installation. Prior to the installation, approval by the City Engineer is required of any non–standard materials. Any non–standard materials shall be demonstrated by the developer's engineer and contractor to equal or exceed City standards.
9. The contractor shall call City of Milpitas Public Works Facilities Inspection at (408) 586–2884 to schedule inspections, 48 hours prior to start of construction.
10. Prior to any work, the contractor shall obtain a City Business license and a Public Works Construction or Encroachment Permit.
11. The Contractor is responsible for the preservation and or perpetuation of all existing monuments and stakes within the Contractor's area of work. The Contractor shall not disturb or remove any monuments or stakes without the permission of the City Engineer, and he shall bear the expense of resetting any monuments or stakes which may be disturbed or removed with or without permission. The Contractor shall provide a minimum of 15 Working days notice to the City Engineer prior to disturbance or removal of existing monuments or stakes. The Contractor shall utilize the services of a California Licensed Land Surveyor to reset all disturbed or removed monuments and stakes or provide witness monuments, and file the required documentation with the County Surveyor pursuant to the Business and Professions Code Section 8771.
12. When it is found that field conditions are not as shown on the plans, the consulting engineer shall make revisions and/or adjustments to the satisfaction of the City Engineer prior to further construction.
13. Upon completion of improvements, the developer's engineer shall submit a letter to the City Engineer certifying that those privately maintained improvements (street, lighting, utilities, etc.) have been constructed per the improvement plans.
14. Developer shall coordinate with Pacific Gas and Electric Company for the design and installation of all gas and electric facilities.
15. Developer shall coordinate with Pacific Bell for the design and installation of all Telephone facilities.
16. Construction shall not begin until 7 AM and shall end by 7 PM, weekdays and weekends, except holidays.
17. A National Pollution Discharge Elimination System Permit (NPDES construction permit) is required prior to commencement of construction activity related to this site and shall be obtained by the owner and/or owner's contractor as appropriate. Any discharge (during construction) of groundwater into the downstream storm system must be uncontaminated. The contractor shall make this determination prior to any discharge.
18. If archaeological materials are uncovered during grading, trenching or other excavation, earthwork within 100' of this area shall be stopped until a professional archaeologist who is certified by the Society of California archaeologist (SCA) or the Society of Professional Archaeologist (SOPA) has had an opportunity to evaluate the significance of the find and suggest appropriate mitigation measures, if they are deemed necessary.
19. Record drawings original plans, including a copy of the AutoCAD files (digital format) shall be furnished to the City Engineer within 60 days of the completion of construction and prior to initial acceptance of public improvements.
20. All grading shall comply with City of Milpitas Grading Ordinance, this plan, and the Preliminary Soils Report prepared by _____ dated _____ and all subsequent addendums.
21. City approval of plans does not relieve the developer from his/her responsibility to correct errors and omissions discovered during construction. Upon request, any required plan revisions shall be promptly submitted to the City Engineer for approval.
22. A water valve shall be installed for each residential unit after the meter and prior to entry of the building such that it is accessible to homeowner and City Meter Reader.
23. The following entities shall be responsible for inspection and maintenance / ownership of the listed facilities and completion certificate by design engineer (state ownership's name and inspection by P.W. inspection or Build. Div.):

Facilities	Ownership	Inspection	Design Engineer
Water	*	**	***
Sewer	*	**	***
Storm	*	**	***
Street	*	**	***
Street Light	*	**	***
Park	*	**	***
Common Area	Homeowner's Association	Build. Div.	Required

* "City of Milpitas" or "Homeowner's Association/Homeowners"
** "P.W. inspection" or "Build. Division"
*** Design Engineer completion certificate "Required" if inspection by Build. Div., "Not required" if inspection by P.W. inspection.

24. Each parcel shall have separate solid waste enclosure and BFI service. Unless, necessary agreements have been recorded to provide for joint use of enclosure and or BFI services for more than one parcel.

STREET SURFACE NOTES

1. Upon completion of rough grading, actual thickness (structural section) of the base material and AC pavement shall be determined based on the results of R–values, Sand equivalents laboratory testing. Geotechnical/Soil Engineer shall recommend the structural sections of streets to the City Engineer for review and approval.
2. The contractor shall not order or place any Portland cement concrete or asphalt concrete paving until the forms and subgrade and/or aggregate base have been inspected by the City Public Works Inspector and approved by the engineer in charge of construction.
3. Edge of existing pavement shall be tack coated prior to constructing new pavement.
4. Standard street monuments shall be installed on all street intersections and other locations shown on this plan in conformance with City Standard Drawing No. 446.
5. Driveway locations shall be set by owner's engineer in compliance with City Standard Drawing No. 430 or 432, unless locations are shown on these plans.
6. One street name sign assembly shall be installed in conformance with City Standard Drawing No. 440 at each intersection, and where shown on plans.
7. All fire hydrants, electroliers and meter boxes shall clear driveways and other facilities by 5', 5' and 1' respectively.
8. All existing facilities shall be adjusted to finish grade as directed by City Public Works Inspector. Manholes, water valve boxes, clean out frames and covers shall be brought to finished grade by the contractor after paving is completed.
9. Minimum 24" box size tree with a caliper of 2" measure 6" above rootball shall be installed, one per lot per street for residential developments and at 20'–50' separation for non–residential developments in conformance with the Approved Street Tree List and according to the City Standard Drawing No. 448.
10. Mailboxes shall be provided as required by U. S. Postal Services, but will not be inspected by the Public Works Inspector.
11. The final or surface layer of asphalt concrete shall not be placed until all on–site improvements have been completed, including all grading, and until all unacceptable concrete work has been removed and replaced, unless otherwise approved by the City Engineer.

UNDERGROUND

1. The letter "W" shall be impressed in the face of curb where each water service crosses the curb, the letter "S" shall be impressed in the face of curb where each sewer lateral crosses the curb and the letter "R" shall be impressed in the face of curb where each recycled water service crosses the curb.
2. The location, depth and existence of underground improvements are shown in their approximate positions based upon information available to the engineer. The contractor shall excavate inspection holes "pot holes" and determine the location and depth of all underground structures and utilities that are in the vicinity of and/or may be affected by the proposed improvement work prior to any construction work which could damage or conflict with said structures and/or utilities.
3. Minimum cover for utilities in roadway (from top of pipe to roadway surface) shall be provided (60" sanitary sewer, 42" water line in street, 48" water line in easement, 24" storm line in street). Where the minimum cover cannot be achieved, such locations shall be specifically identified on the plans and the method of protecting the pipe and valve stems shall be indicated. The following solutions shall be subject to the City Engineer's approval:
   a) Use of ductile iron pipe and butterfly valves.
   b) Concrete cap.
   c) Any other solution devised by the Engineer and Contractor.
4. Water services and mains are to be separated a minimum of 10' horizontal distance and 1' vertical distance from sewer and recycled water laterals and mains. Potable water lines shall be above all storm drain, sanitary sewer and recycle water lines.
5. Separation between the Recycle water lines from other utilities; such as potable water, fire protection and sanitary sewer; shall be in accordance with the City of Milpitas "Recycled (non–potable) Water Guidelines". Call (408) 586–3329 for a copy.
6. House sewers shall not be connected to laterals until sewers are tested.
7. One sanitary sewer lateral shall be constructed to each lot at the location to be staked in field by owner's engineer prior to construction. A backflow protection device shall be installed per City Standard Drawing No. 624 when the elevation of the lowest floor containing gravity waste drainage is less than one foot above the surface elevation of the nearest upstream public sewer structure (manhole, etc.).
8. Connections to existing water mains shall be approved by City Engineer. Contractor shall perform all excavation, prepare site, furnish all materials, install tapping tee, valve and all thrust blocks, backfill, restore surface, and clean up. Non–metallic water lines shall be installed with a trace wire per City Standard Drawing No. 752.
9. All water valves shall be clustered, unless otherwise directed by the City Engineer.
10. Each lot shall have separate water, sewer and storm drain services.
11. Water service pressure regulators and sewage backflow protection devices are shown on these plans for the information of the developer and City's Building Division. These items are not included in the Public Works inspection or acceptance.
12. All utility stubs, especially water line components, shall be capped.
13. Abandonment of existing water lines shall take place at the main line.
14. Contractors shall not turn water valves without prior approval from Utility Maintenance Supervisor at (408) 586–2640.
15. All metallic underground piping shall be protected against corrosion per City standard specifications.
16. The contractor is responsible for performing locate services for those facilities installed by the contractor until such time as the work has been officially accepted by the City of Milpitas. The marking, labeling, and timing of such locates shall be in conformance with the requirements of Underground Service Alert.

SIGNING AND STRIPING

1. All signs shall conform to State of California, Traffic Manual, Chapter 4, and latest edition of "Uniform Sign Chart."
2. Signs shall be of standard size designated for each type in the Traffic Manual, except where noted otherwise.
3. Mounting shall conform to appropriate provisions of Chapter 4, Traffic Manual, and applicable "standard plans," State of California (Caltrans), latest edition, except where otherwise indicated on plans.
4. All traffic signs (except street nameplates) shall be of minimum .080 gage aluminum blanks with reflective faces of Scotchlite (engineer grade) or approved equal. Except, R1 and R2 signs which require high intensity.
5. Striping shall conform to appropriate provisions of Chapter 6, "Markings" of the Traffic Manual and Chapter XVI of the Maintenance Manual, State of California.
6. Striping paint for City streets shall be:
   a) Paint shall be TMT Pathway, or approved equal. Solvent–based paints shall not be used.
   b) TMT Pathway #2675A5 water base white paint, or approved equal
   c) TMT Pathway #2676A5 water base yellow paint, or approved equal
   d) TMT Pathway #2677A7 water base black paint, or approved equal
   e) Glass beads shall conform to State Specification No. 8010–11E–22 (Type II).

   The certification requirements shall be submitted for ready mixed white and yellow paints.
6. Raised Pavement Markers of various types shall conform to Section 85, "Pavement Markers", of the State Standard Specifications, these Technical Provisions, and as shown on the plans.
8. Painted legends shall conform to standard sizes and patterns used by the City of Milpitas. Arrangements may be made to use the City's Stencils by calling (408) 586–2631.

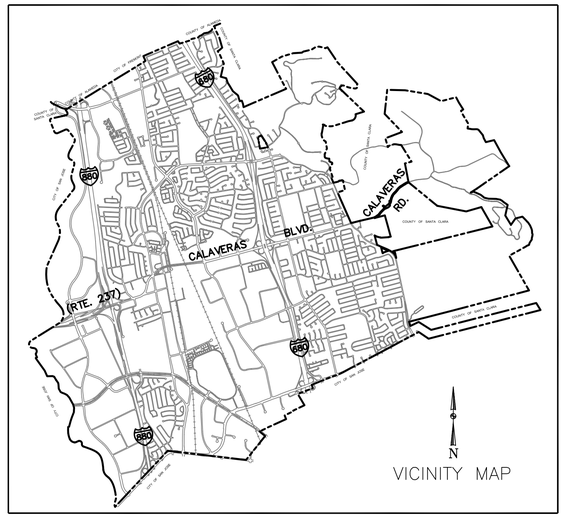
STREET LIGHTS

1. Splicing of street light conductor is permitted only in pull boxes.
2. Electroliers shall be connected to the closest underground secondary P.G.&E. source. Pull (junction) boxes shall be required at each electrolier and where more than one bend of the cable is necessary to reach to electrolier, where shown on plans, and at service point where no P.G.&E. box is installed. Install in–line fuses at electroliers, in the hand hole of each pole. Fuses shall be installed on each energized lead, and shall be adequately sized and enclosed in a phenolic case. Head configuration shall be either double door mounted ballast or single door – swing down ballast. 120/240 volt ballasts shall be provided. Voltage and wattage of electroliers shall be as shown on the plans.
3. Street Light Numbers will be assigned by the City and installed on the poles by the contractor as directed by the Public Works Inspector.

CITY OF MILPITAS
CALIFORNIA
INCORPORATED
JANUARY 26, 1954

CITY OF MILPITAS

ENGINEERING DIVISION



VICINITY MAP

INDEX OF DRAWINGS

TITLE	SHEET
TITLE SHEET	1
BLUE PRINT FOR A CLEAN BAY	2
TOPOGRAPHIC SURVEY AND DEMOLITION PLAN	3
GRADING AND DRAINAGE PLAN	4
CITY STANDARD DETAILS	5
LANDSCAPE AND IRRIGATION PLAN	6
EROSION CONTROL PLAN	7

1–800–227–2600
CALL BEFORE YOU DIG
USA
UNDERGROUND SERVICE ALERT
1–800–227–2600

CIVIL ENGINEER: I hereby declare that I am the engineer of work for this project, that I have exercised responsible charge over the design of the project as defined in section 6703 of the business and professions codes, and that the design is consistent with current standards. The design shown hereon is necessary and reasonable and does not restrict any historic drainage flows from adjacent properties nor increase drainage to adjacent properties. The design includes principles and techniques to reduce quantity and improve the quality of storm water runoff, as required by NPDES. I understand that the check of project drawings and specifications by the City of Milpitas is confined to a review only and does not relieve me, as engineer of work, of my responsibilities for project design.

_____
SIGNATURE P.E.

Firm: _____

Address: _____

Telephone: _____

SEAL

SOILS ENGINEER: These plans have reviewed and found to be in substantial conformance with the intent and purpose of the geotechnical exploration report dated _____, prepared by _____.

_____
(Name) Date

Firm: _____

Address: _____

_____

Telephone: _____

SEAL

Record Drawings

To be competed prior to acceptance of work by the City

_____
Signature & Seal Date

P.E. No._____ Exp. _____

Public Works Inspector:_____

Revisions

Num.	Date	By	Description	City Engr. Aprv.	Date

CITY OF MILPITAS
ENGINEERING DIVISION

Approved:

_____ Date
City Engineer

Any changes to public improvements shall be approved by the City engineer

Recommended for approval:

Fire Dept._____ Date: _____

Engineering_____ Date: _____

Project No.

File No.

E.P. No.

Sheet ____ of ____