

EL CAMINO REAL IMPROVEMENTS

PROJECT BACKGROUND

El Camino Real is located in the western portion of Zone 1 and spans the entire length of the Zone for approximately 8,400 LF. The existing water mains along the road consist of 100 LF of 8" asbestos cement (AC), 1,700 LF of 8" ductile iron pipe (DIP), 3,800 LF of cast iron pipe (CIP), and 1,300 LF of polyvinylchloride (PVC) for a total 6,900 LF as shown in the map to the left. The District has reported several leaks along the alignment primarily along the CIPs which were installed in 1950 compared to all other pipe on the road installed in the 1990's. This project replaces the 3,800 LF of 8" CIP with 8" DIP, in addition to the installation of 300 LF of new 8" DIP. There are also 8 fire hydrants, 4 fire services, and 23 service connections that will be replaced. Hydraulic analysis indicates an 8" water main along El Camino Real is sufficient to provide fire flows well above the minimum 1,500 gpm at 20 psi. Distribution System Analysis No. 081

PROPOSED IMPROVEMENTS

Replace 3,800 LF of 8" CIP with 8" DIP
 Install 300 LF of new 8" DIP
 Replace 8 fire hydrant assemblies
 Replace 23 service connections
 Replace 4 fire service connections

PROJECT BENEFITS

The El Camino Real Improvements replaces old and aging water main, reduces maintenance, and improves fire flows at various locations along Old County Road to as much as 2,500 gpm.

INSTALL 300 LF OF 8" DIP
FROM N1042X TO N1727

REPLACE 3,500 LF OF 8"
CIP WITH 8" DIP FROM
N17908 TO N1042X

EXIST 1,300 LF OF 8" PVC
FROM N1025X TO N17908
TO REMAIN

REPLACE 300 LF OF 8" CIP
WITH 8" DIP FROM N1023X
TO N1025X

EXIST 800 LF OF 18" PVC
FROM N17909 TO N1912X
TO REMAIN

REPLACE 100 LF OF 8" AC
WITH 8" DIP FROM N1745
TO N1007X

EXIST 1,700 LF OF 8" DIP
FROM N1007X TO N17909
TO REMAIN

NORTH ROAD
N1727
N1042X

N17908

N1025X

N1023X

N1912X

N17909

N1007X

N1745

SCALE: 1" = 1,200'

EXPENDITURE SCHEDULE (2015 DOLLARS)

	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	Future
Planning, Design, CM	-----	-----	-----	-----	-----	-----
Construction	-----	-----	-----	-----	-----	-----
Contingency	-----	-----	-----	-----	-----	-----
Total Cost	-----	-----	-----	-----	-----	-----



Pakpour Consulting Group, Inc.
 5776 Stoneridge Mall Road, Suite 320
 Pleasanton, CA 94588
 925.224.7717 Fax 925.224.7726
 www.pcgengr.com

JOB No. 10012.07
 DATE 05/28/15
 SCALE AS NOTED
 DRAWN: BY BL
 CKD JP



MID-PENINSULA WATER DISTRICT
 SAN MATEO COUNTY, CALIFORNIA
 3 DAIRY LANE
 BELMONT, CA 94002

CAPITAL IMPROVEMENT PROGRAM - 2015 UPDATE
 EL CAMINO REAL IMPROVEMENTS
 PROJECT 15-76

SHEET X

OF X

MALCOLM AVENUE AREA IMPROVEMENTS

PROJECT BACKGROUND

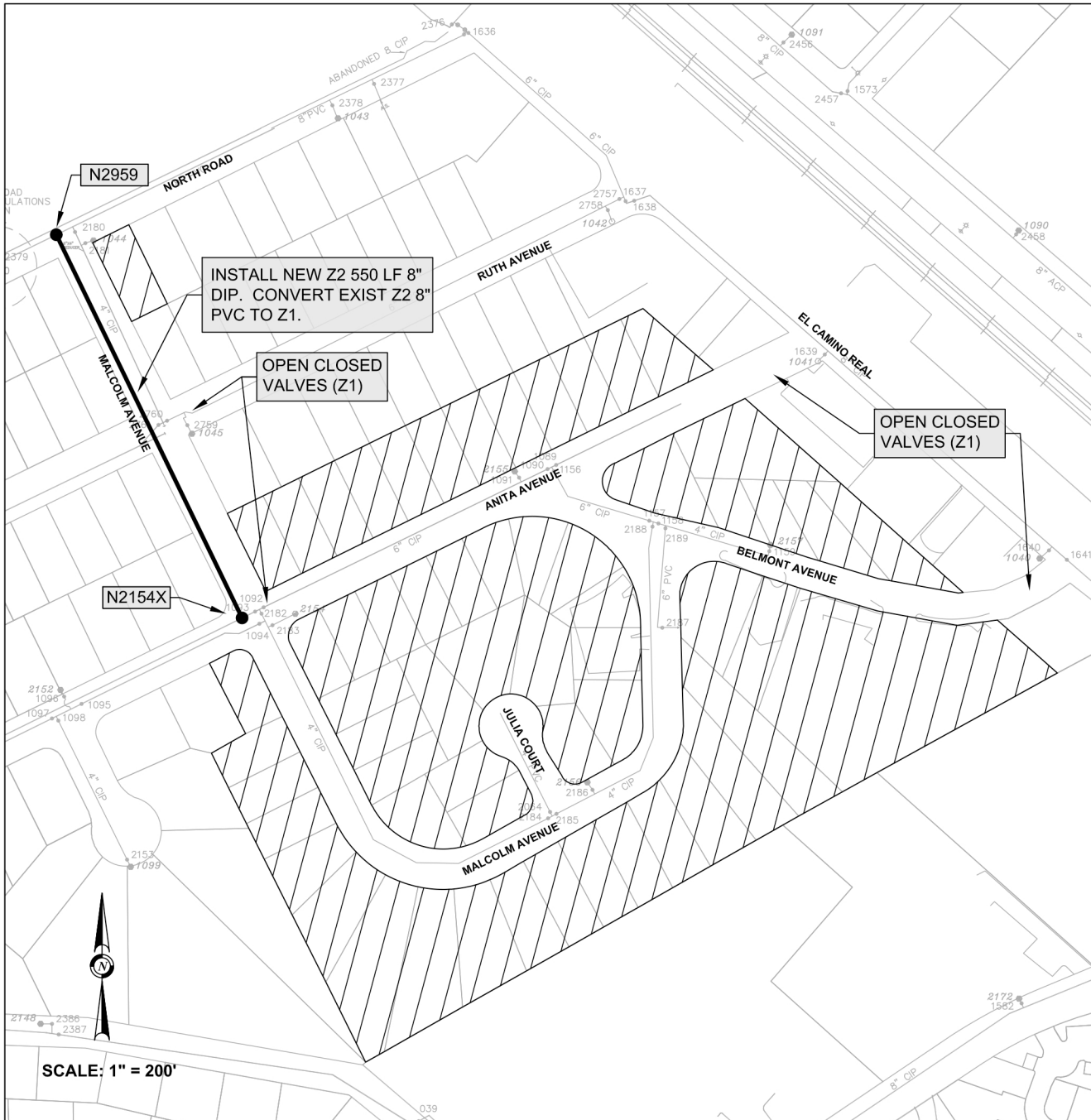
The neighborhood along Malcolm Avenue, Anita Avenue, Julia Court, and Belmont Avenue is currently served by Zone 2 and consists of 55 residences and 5 fire hydrants. Streets to the immediate north of Malcolm Avenue and those on Ruth Avenue and North Road are all served by Zone 1. The zones are connected at the North Road Regulating Station in addition to four other connections via closed valves creating 5 dead ends within the area. This project eliminates all the dead ends except the one associated with the North Road Regulator by installing a new parallel 550 LF ductile iron pipe (DIP) water main along the existing Zone 2 water main on Malcolm Avenue. The existing Zone 2 water main would become part of Zone 1 and the new water main would become part of Zone 2. Hydraulic analysis indicates a static pressure loss of approximately 40 psi to an average 98 psi with the Zone 2 to Zone 1 switch. Fire flows are minimally affected with differences around 100 gpm on average however the majority of the flows are above 2,000 gpm. Distribution System Analysis No. 079

PROPOSED IMPROVEMENTS

Install 550 LF of 8" DIP along Malcolm Avenue
Reconfigure Zone 1 and 2 boundaries
Replace 2 service connections

PROJECT BENEFITS

The Malcolm Avenue Area Improvements include reduced static pressures, elimination of 4 dead ends, creating a completely looped system in both Zones 1 and 2, increased fire protection for a few select nodes.



Pakpour Consulting Group, Inc.
5776 Stoneridge Mall Road, Suite 320
Pleasanton, CA 94588
925.224.7717 Fax 925.224.7726
www.pcgengr.com

JOB No.	10012.07
DATE	4/4/16
SCALE	AS NOTED
DRAWN:	BY <u>BL</u> CKD <u>JP</u>



MID-PENINSULA WATER DISTRICT
SAN MATEO COUNTY, CALIFORNIA
3 DAIRY LANE
BELMONT, CA 94002

CAPITAL IMPROVEMENT PROGRAM
MALCOLM AVENUE AREA IMPROVEMENTS
PROJECT 15-74