



**SAN RAFAEL CITY COUNCIL – MONDAY, DECEMBER 3, 2018**

**SPECIAL STUDY SESSION AT 6:00PM  
3<sup>RD</sup> FLOOR CONFERENCE ROOM, CITY HALL  
1400 FIFTH AVENUE, SAN RAFAEL, CALIFORNIA**

1. Discussion re: Changes to Marin Sanitary Service Recycling Fund and Rate Setting Methodology (CM)

**REGULAR MEETING  
COUNCIL CHAMBERS, CITY HALL  
1400 FIFTH AVENUE, SAN RAFAEL, CALIFORNIA**

**AGENDA**

**OPEN SESSION – COUNCIL CHAMBERS, CITY HALL**

1. None.

**CLOSED SESSION – THIRD FLOOR CONFERENCE ROOM, CITY HALL**

2. Closed Session: None.

**OPEN TIME FOR PUBLIC EXPRESSION – 7:00 PM**

The public is welcome to address the City Council at this time on matters not on the agenda that are within its jurisdiction. Please be advised that pursuant to Government Code Section 54954.2, the City Council is not permitted to discuss or take action on any matter not on the agenda unless it determines that an emergency exists, or that there is a need to take immediate action which arose following posting of the agenda. Comments may be no longer than two minutes and should be respectful to the community.

**CITY MANAGER’S REPORT:**

3. City Manager’s Report:

**CONSENT CALENDAR:**

The opportunity for public comment on consent calendar items will occur prior to the City Council’s vote on the Consent Calendar. The City Council may approve the entire consent calendar with one action. In the alternative, items on the Consent Calendar may be removed by any City Council or staff member, for separate discussion and vote.

4. Consent Calendar Items:

- a. **Approval of Minutes**

- Approval of Minutes of City Council / Successor Agency Regular Meeting of November 19, 2018 (CC)

- Recommended Action – Approve as submitted*

- b. **Eric Holm Resolution of Appreciation for Service on ADA Access Advisory Committee**  
Resolution of Appreciation to Eric Holm for Nine Years of Service on the ADA Access Advisory Committee (CC)

- Recommended Action – Adopt Resolution*

- c. **Eric Holm Resolution of Appreciation for Service on Park & Recreation Commission**  
Resolution of Appreciation to Eric Holm for Eight Years of Service on the Park and Recreation Commission (CC)  
*Recommended Action – Adopt Resolution*
- d. **Agency Report of Public Officials 2019**  
Adoption of Agency Report of Public Officials Appointments (FPPC Form 806) and Announcement of Pending City Council Appointments for 2019 (CA)  
*Recommended Action – Approve staff recommendation*
- e. **Paramedic Service Special Tax Procedures**  
Second Reading and Final Adoption of Ordinance No. 1965 - An Ordinance of the City of San Rafael Amending Chapter 3.28 of the San Rafael Municipal Code Regarding the Paramedic Service Special Tax (CA)  
*Recommended Action – Approve Final Adoption of Ordinance 1965*
- f. **21 G Street Project Below Market Rate Housing Agreement**  
Resolution Authorizing the City Manager to Execute a Below Market Rate Housing Agreement for a For-Sale Ownership Residential Unit at 21 G Street (APN 011-232-10) (CD)  
*Recommended Action – Adopt Resolution*
- g. **San Rafael Downtown Business Improvement District Assessment Annual Renewal**  
Resolution Declaring the City Council’s Intention to Levy an Annual Assessment for the Downtown San Rafael Business Improvement District (ED)  
*Recommended Action – Adopt Resolution*
- h. **On-Street Dining**  
Informational Report Regarding Streamlining the Parklet Program to an On-Street Dining Applications Process (ED)  
*Recommended Action – Accept report*
- i. **Cal Fire – Fire Prevention Grant Application Approval**  
Resolution Approving the Filing of an Application for California Climate Investment Fire Prevention Grant Program (FD)  
*Recommended Action – Adopt Resolution*
- j. **Second and Third Street SMART-Related Signal Improvements**  
Resolution Authorizing the City Manager to Execute a Second Amendment to the Memorandum of Understanding with the Sonoma-Marin Area Rail Transit District to Include Construction of Traffic Signal Improvements in the Amount of \$324,876, and Authorizing Contingency Funds in the Amount of \$55,124, for a Total Appropriated Amount of \$380,000 (PW)  
*Recommended Action – Adopt Resolution*



**k. Surplus Property Conveyance**

Resolution Approving the Conveyance of Surplus City Property to the State of California in Connection with the Widening of the Northbound U.S. 101/Eastbound I-580 Freeway Off-ramp (PW)

*Recommended Action – Adopt Resolution*

**l. North Bound Central San Rafael Off-ramp**

Resolution Authorizing the City Manager to Execute the Professional Services Agreement with Parisi/CSW Design Group to Design the Installation of a Second Right Turn from the North Bound 101 Off-ramp onto Second Street, in an Amount Not to Exceed \$121,500 (PW)

*Recommended Action – Adopt Resolution*

**m. Fire Station 57 Construction Project**

Resolution Approving a First Amendment to Lease Agreement Between the County of Marin, County Service Area 19, and the City of San Rafael Concerning Fire Station 57 at 3535 Civic Center Drive (PW)

*Recommended Action – Adopt Resolution*

**SPECIAL PRESENTATIONS:**

5. Special Presentations:

- a. Presentation of Resolutions of Appreciation to Eric Holm for Years of Service on the ADA Access Advisory Committee and the Park and Recreation Commission

**PUBLIC HEARINGS:**

6. Public Hearings:

**a. Rental Discrimination Ordinance**

Consideration of an Ordinance of the City of San Rafael Amending the San Rafael Municipal Code by Adding New Chapter 10.98 Concerning “Source of Income” Discrimination in Rental Housing (CM)

*Recommended Action – Pass Ordinance to Print*

**OTHER AGENDA ITEMS:**

7. Other Agenda Items:

**a. Small Cell “5G” Wireless Communication Technology**

Report on Small Cell “5G” Wireless Communication Technology to Include: a) Presentation on Recent Federal Communication Commission (FCC) Ruling Regarding Small Cell Facilities; and b) Review of Draft Ordinance, Regulations and Standards for Permitting Small Cell Facilities (CD)

*Recommended Action – Accept report and provide direction to staff to prepare a draft ordinance and resolution for consideration at the December 17, 2018 City Council meeting*

**b. Funding for Affordable Housing in San Rafael**

Resolution Declaring a Shelter Crisis Pursuant to SB 850 (Chapter 48, Statutes of 2018 and Government Code § 8698.2) (CM)

*Recommended Action – Adopt Resolution*

**COUNCILMEMBER REPORTS / REQUESTS FOR FUTURE AGENDA ITEMS:**

**(including AB 1234 Reports on Meetings and Conferences Attended at City Expense)**

8. Councilmember Reports:

**SAN RAFAEL SUCCESSOR AGENCY:**

1. Consent Calendar: None.

**ADJOURNMENT:**

*Any records relating to an agenda item, received by a majority or more of the Council less than 72 hours before the meeting, shall be available for inspection in the City Clerk's Office, Room 209, 1400 Fifth Avenue, and placed with other agenda-related materials on the table in front of the Council Chamber prior to the meeting. Sign Language interpreters and assistive listening devices may be requested by calling (415) 485-3198 (TDD) or (415) 485-3066 (voice) at least 72 hours in advance. Copies of documents are available in accessible formats upon request. Public transportation is available through Golden Gate Transit, Line 22 or 23. Paratransit is available by calling Whistlestop. Wheels at (415) 454-0964. To allow individuals with environmental illness or multiple chemical sensitivity to attend the meeting/hearing, individuals are requested to refrain from wearing scented products.*

In the Council Chambers of the City of San Rafael, Monday, November 19, 2018 at 7:00 p.m.



**Regular Meeting  
San Rafael City Council**

**Minutes**

[How to Participate in your City Council Meeting](#)

Present: Mayor Phillips  
Vice-Mayor Gamblin  
Councilmember Bushey  
Councilmember Colin

Absent: Councilmember McCullough

Also Present: City Manager Jim Schutz  
City Attorney Robert Epstein  
City Clerk Lindsay Lara

**OPEN SESSION – COUNCIL CHAMBERS, CITY HALL**

1. None.

**CLOSED SESSION – THIRD FLOOR CONFERENCE ROOM, CITY HALL**

2. Closed Session: - None.

**OPEN TIME FOR PUBLIC EXPRESSION – 7:00 PM**

- Sandra Miller addressed the City Council regarding fire safety
- Ken Cochrane addressed the City Council regarding fire safety
- Pat Cruz addressed the City Council regarding fire safety
- Mayor Phillips / Pat Cruz

**CITY MANAGER’S REPORT:**

3. City Manager’s Report:

- City Manager Jim Schutz:
  - Announced Parade of Lights and Winter Wonderland on Friday, November 23, 2018 from 12:00-8:00pm;
  - Introduced Fire Chief Chris Gray who reported on fire safety
- Mayor Phillips
- Fire Chief Chris Gray reported on fire safety
- Mayor Phillips / Chief Gray

- Mayor Phillips announced San Rafael being named as the ninth best city to live in the Bay Area by San Francisco Magazine

**SPECIAL PRESENTATIONS:**

**4. Special Presentations:**

**a. Presentation from Pacific Gas & Electric (PG&E) on Recent Gas Main Construction in San Rafael (PW)**

Assistant Public Works Director Kevin McGowan introduced Brian Gordon, Project Manager of Pacific Gas & Electric (PG&E)

Brian Gordon, Project Manager for PG&E, gave a presentation

Mayor Phillips

Kevin Chang, Project Manager for PG&E, gave a presentation

Mayor Phillips

Councilmember Bushey / Brian Gordon

Councilmember Bushey / Brian Gordon

Councilmember Bushey / Brian Gordon

Councilmember Bushey / Brian Gordon

Councilmember Bushey / Brian Gordon

Councilmember Bushey / Kevin Chang

Councilmember Colin / Brian Gordon

Mayor Phillips / Brian Gordon

Mayor Phillips / Brian Gordon

Mayor Phillips / Kevin McGowan

Mayor Phillips / Brian Gordon / Councilmember Bushey

Mayor Phillips invited public comment

Lori Schifrin

Mayor Phillips closed the public comment period

Brian Gordon

Mayor Phillips

Councilmember Gamblin

Mayor Phillips

**CONSENT CALENDAR:**

**5. Consent Calendar Items:**

Mayor Phillips invited public comment; however, there was none.

Councilmember Bushey moved and Councilmember Gamblin seconded to approve Consent Calendar Items:

- a. **Approval of Minutes**  
**Approval of Minutes of City Council / Successor Agency Regular Meeting of November 5, 2018 (CC)**  
[Minutes 2018-11-05](#)  
  
Approved as submitted
- b. **Measure E Transactions and Use Tax Oversight Committee Reappointment**  
**Reappointment of Jacqueline Schmidt and Lawrence "Larry" Luckham to Fill Two Four-Year Terms on the Measure E Transactions and Use Tax Oversight Committee to the End of November 2022 (CC)**  
[Measure E Transactions and Use Tax Oversight Committee Reappointment](#)  
  
Approved staff recommendation
- c. **Amendments to the San Rafael Municipal Code**  
**Second Reading and Final Adoption of Ordinance No. 1964 - An Ordinance of the City of San Rafael Amending Title 11 (Public Works), Title 14 (Zoning Ordinance) and the Zoning Maps of the San Rafael Municipal Code to: A) Add a Permit Exemption for Certain Encroachments into the Public Right of Way; B) Make Minor Clarifications and Corrections of Text; C) Modify Land Uses and Land Use Definitions and Standards; and D) Modify the Zoning District Boundary Line for Three Properties Located at Rice Drive/Francisco Blvd (APN's 013-041-52, -55, -67) and 2 Properties Located at Lincoln Ave/Prospect Dr (APN'S 011-092-15 and -26) (ZO18-002/ZC18-001) (CD)**  
[Amendments to the San Rafael Municipal Code](#)  
  
APPROVED FINAL ADOPTION OF ORDINANCE NO. 1964 - AN ORDINANCE OF THE CITY OF SAN RAFAEL AMENDING TITLE 11 (PUBLIC WORKS), TITLE 14 (ZONING ORDINANCE) AND THE ZONING MAPS OF THE SAN RAFAEL MUNICIPAL CODE TO: A) ADD A PERMIT EXEMPTION FOR CERTAIN ENCROACHMENTS INTO THE PUBLIC RIGHT OF WAY; B) MAKE MINOR CLARIFICATIONS AND CORRECTIONS OF TEXT; C) MODIFY LAND USES AND LAND USE DEFINITIONS AND STANDARDS; AND D) MODIFY THE ZONING DISTRICT BOUNDARY LINE FOR THREE PROPERTIES LOCATED AT RICE DRIVE/FRANCISCO BLVD (APN'S 013-041-52, -55, -67) AND 2 PROPERTIES LOCATED AT LINCOLN AVE/PROSPECT DR (APN'S 011-092-15 AND -26) (ZO18-002/ZC18-001)
- d. **G Street Improvements - Phase II Project Completion**  
**Accept Completion of the G Street Improvements - Phase II Project (City Project No. 11345) and Authorize the City Clerk to File the Notice of Completion (PW)**  
[G Street Improvements - Phase II Project Completion](#)

Approved staff recommendation

AYES: Councilmembers: Bushey, Colin, Gamblin & Mayor Phillips  
NOES: Councilmembers: None  
ABSENT: Councilmembers: McCullough

**PUBLIC HEARINGS:**

**6. Public Hearings:**

**a. Paramedic Service Special Tax Procedures**

**Consideration of an Ordinance of the City of San Rafael Amending Chapter 3.28 of the San Rafael Municipal Code Regarding the Paramedic Service Special Tax (CA)**  
[Paramedic Service Special Tax Procedures](#)

[Assistant City Attorney Lisa Goldfien presented the staff report](#)

[Councilmember Bushey / Lisa Goldfien](#)

[Mayor Phillips declared the public hearing opened; however, there bring no comment from the audience, Mayor Phillips closed the public hearing](#)

[Councilmember Bushey moved and Councilmember Gamblin seconded to dispense with the reading of the ordinance in its entirety and refer to it by title only, and pass Charter Ordinance No. 1965 to print by the following vote to wit:](#)

PASSED ORDINANCE NO. 1965 TO PRINT - AN ORDINANCE OF THE CITY OF SAN RAFAEL AMENDING CHAPTER 3.28 OF THE SAN RAFAEL MUNICIPAL CODE REGARDING THE PARAMEDIC SERVICE SPECIAL TAX

AYES: Councilmembers: Bushey, Colin, Gamblin & Mayor Phillips  
NOES: Councilmembers: None  
ABSENT: Councilmembers: McCullough

**b. "TEFRA" Public Hearing for Tax-Exempt Financing - 55 Fairfax Street**

**Resolution Approving the Issuance of a Revenue Note by the California Municipal Finance Authority for the Purpose of Providing Financing for a Residential Rental Housing Facility Known as Casa Vista Apartments, and with Regard to Certain Other Matters Relating Thereto (CD)**  
[TEFRA Public Hearing for Tax-Exempt Financing - 55 Fairfax Street](#)

[Assistant City Attorney Lisa Goldfien presented the staff report](#)

[Mayor Phillips declared the public hearing opened; however, there bring no comment from the audience, Mayor Phillips closed the public hearing](#)

[Councilmember Bushey moved and Councilmember Gamblin seconded to adopt the Resolution](#)

RESOLUTION 14602 – RESOLUTION APPROVING THE ISSUANCE OF A REVENUE NOTE BY THE CALIFORNIA MUNICIPAL FINANCE AUTHORITY FOR THE PURPOSE OF PROVIDING FINANCING FOR A RESIDENTIAL RENTAL HOUSING FACILITY KNOWN AS CASA VISTA APARTMENTS, AND WITH REGARD TO CERTAIN OTHER MATTERS RELATING THERETO

AYES: Councilmembers: Bushey, Colin, Gamblin & Mayor Phillips  
NOES: Councilmembers: None  
ABSENT: Councilmembers: McCullough

**COUNCILMEMBER REPORTS / REQUESTS FOR FUTURE AGENDA ITEMS:**

**7. Councilmember Reports:**

- Councilmember Colin attended an AARP Workshop with Community Development Director Paul Jensen
- Councilmember Bushey attended Marin County Council of Mayors and Councilmembers (MCCMC) meeting as an Association of Bay Area Government (ABAG) Representative
- Mayor Phillips commented on the progress of the City Council 2019 Appointments

**SAN RAFAEL SUCCESSOR AGENCY**

- 1. Consent Calendar: None.**

**ADJOURNMENT:**

Mayor Phillips adjourned the City Council meeting at 8:10 p.m.

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LINDSAY LARA, City Clerk

APPROVED THIS \_\_\_\_ DAY OF \_\_\_\_\_, 2018

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GARY O. PHILLIPS, Mayor



Items 4.b and 4.c to  
be posted to the  
website following the  
City Council meeting





**SAN RAFAEL CITY COUNCIL AGENDA REPORT**

**Department: City Attorney**

**Prepared by: Lisa Goldfien, Assistant City Attorney**

**City Manager Approval:**

**TOPIC: AGENCY REPORT OF PUBLIC OFFICIALS 2019**

**SUBJECT: ADOPTION OF AGENCY REPORT OF PUBLIC OFFICIALS APPOINTMENTS (FPPC FORM 806) AND ANNOUNCEMENT OF PENDING CITY COUNCIL APPOINTMENTS FOR 2019**

**RECOMMENDATION:**

Adopt Form 806, Agency Report of Public Official Appointments, and direct staff to publish it to the City website.

**BACKGROUND:**

In 2011, the Fair Political Practices Commission (FPPC) initiated enforcement action in some cities against city councilmembers who had participated in city council decisions to appoint themselves to paid positions on the boards of external entities (e.g., a Joint Powers Authority governing board). Under then-existing FPPC Regulation 18705.5, these decisions resulted in a material financial effect on the personal finances of the appointees when the compensation they received as a result of their appointment equaled or exceeded \$250 within any 12-month period.

This action prompted a number of cities to petition the FPPC to amend Regulation 18705.5. In March 2012, the FPPC amended the regulation to state that a councilmember may participate in a decision to appoint themselves to a position on a public agency board, commission or JPA that will result in additional compensation to them, subject to conditions stated in the regulation. One of these conditions is that the city council must first have adopted and posted on the city's website a form, now designated as Form 806, that identifies each position the city council appoints for which compensation is paid, the salary or stipend for each position, and the name of each official who has been appointed as the agency's representative, or alternate. Because the purpose of the new regulation is to address the issue of councilmembers voting to give themselves additional compensation, the regulation is not concerned with paid positions that are not appointed by the City Council (e.g., the San Francisco Bay Conservation Development Commission).

**ANALYSIS:**

Form 806 is not intended to list every board or commission appointment for which a stipend is paid, but rather to include only those appointments to boards and commissions that are made by the City Council itself. Adoption of a proper Form 806 will avoid possible conflicts of interest for Councilmembers when they participate in appointing themselves to board positions for which a stipend is paid that will equal or exceed \$250 within any 12-month period. If the form is posted,

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**FOR CITY CLERK ONLY**

**Council Meeting:** \_\_\_\_\_

**Disposition:** \_\_\_\_\_

all Councilmembers can participate in the appointment, even those who are being appointed and will receive the stipend.

The FPPC has indicated that each city should adopt a Form 806 to identify all paid positions. There is only one board appointment the City Council makes for which a stipend is paid that will equal or exceed \$250 within any 12-month period. The appointees to the San Rafael Sanitation District Board each receive a stipend of \$100 per meeting attended, for meetings scheduled 12 times per year. Staff has prepared the attached Form 806 showing the City Council appointees and alternate.

Form 806 must be posted on the City's website and will have to be amended and reposted when there is any change in the compensation or number of meetings, or when a new appointment is made to the San Rafael Sanitation District Board, or to any other board or commission position for which qualifying compensation is to be paid.

**FISCAL IMPACT:**

There is no fiscal impact associated with this item.

**RECOMMENDED ACTION:**

Adopt Form 806, Agency Report of Public Official Appointments, and direct staff to publish it to the City's website.

**ATTACHMENTS:**

1. Form 806
2. Draft City Council Appointments for Calendar Year 2019

**Agency Report of:  
Public Official Appointments**

**A Public Document**

<b>1. Agency Name</b>		<b>California Form 806</b> <small>For Official Use Only</small>	
City of San Rafael			
<b>Division, Department, or Region</b> <i>(If Applicable)</i> San Rafael City Council			
<b>Designated Agency Contact</b> <i>(Name, Title)</i> Jim Schutz, City Manager		<b>Date Posted:</b> 12/04/2018 <small>(Month, Day, Year)</small>	
<b>Area Code/Phone Number</b> 415-485-3070	<b>E-mail</b> city.manager@cityofsanrafael.org	Page <u>1</u> of <u>1</u>	

**2. Appointments**

Agency Boards and Commissions	Name of Appointed Person	Appt Date and Length of Term	Per Meeting/Annual Salary/Stipend
San Rafael Sanitation District	▶ Name <u>Phillips, Gary</u> <small>(Last, First)</small>  Alternate, if any <u>McCullough, Andrew</u> <small>(Last, First)</small>	▶ <u>12 / 17 / 18</u> <small>Appt Date</small>  ▶ <u>1 year</u> <small>Length of Term</small>	▶ Per Meeting: \$ <u>100.00</u>  ▶ Estimated Annual: <input type="checkbox"/> \$0-\$1,000 <input type="checkbox"/> \$2,001-\$3,000 <input checked="" type="checkbox"/> \$1,001-\$2,000 <input type="checkbox"/> <u>          </u> Other
San Rafael Sanitation District	▶ Name <u>Bushey, Maribeth</u> <small>(Last, First)</small>  Alternate, if any <u>McCullough, Andrew</u> <small>(Last, First)</small>	▶ <u>12 / 17 / 18</u> <small>Appt Date</small>  ▶ <u>1 year</u> <small>Length of Term</small>	▶ Per Meeting: \$ <u>100.00</u>  ▶ Estimated Annual: <input type="checkbox"/> \$0-\$1,000 <input type="checkbox"/> \$2,001-\$3,000 <input checked="" type="checkbox"/> \$1,001-\$2,000 <input type="checkbox"/> <u>          </u> Other
	▶ Name _____ <small>(Last, First)</small>  Alternate, if any _____ <small>(Last, First)</small>	▶ <u>  /  /  </u> <small>Appt Date</small>  ▶ _____ <small>Length of Term</small>	▶ Per Meeting: \$ _____  ▶ Estimated Annual: <input type="checkbox"/> \$0-\$1,000 <input type="checkbox"/> \$2,001-\$3,000 <input type="checkbox"/> \$1,001-\$2,000 <input type="checkbox"/> <u>          </u> Other
	▶ Name _____ <small>(Last, First)</small>  Alternate, if any _____ <small>(Last, First)</small>	▶ <u>  /  /  </u> <small>Appt Date</small>  ▶ _____ <small>Length of Term</small>	▶ Per Meeting: \$ _____  ▶ Estimated Annual: <input type="checkbox"/> \$0-\$1,000 <input type="checkbox"/> \$2,001-\$3,000 <input type="checkbox"/> \$1,001-\$2,000 <input type="checkbox"/> <u>          </u> Other

**3. Verification**

*I have read and understand FPPC Regulation 18702.5. I have verified that the appointment and information identified above is true to the best of my information and belief.*

Jim Schutz	City Manager		
<small>Signature of Agency Head or Designee</small>	<small>Print Name</small>	<small>Title</small>	<small>(Month, Day, Year)</small>

Comment: \_\_\_\_\_

<b>CITY COUNCIL APPOINTMENTS</b>	<b>2018</b>	<b>2019</b>
<b>POSITION</b>		
Vice-Mayor, City Council	John Gamblin	Andrew McCullough
<b>Other Agencies (OA)</b>		
San Rafael Sanitation District	Gary O. Phillips (C) Maribeth Bushey Andrew McCullough (Alt)	
Central Marin Sanitation Agency (informational only- appointed by SRSD)	Maribeth Bushey Dean DiGiovanni <del>Al Boro (Alt)</del> Katie Rice (Alt)	
City Rep. to Association of Bay Area Government (ABAG)	Maribeth Bushey	
Joint Powers Authority Oversight Committee	Kate Colin	
League of California Cities, North Bay Division	Maribeth Bushey Andrew McCullough (Alt)	
Sonoma/Marin Area Rail Transit (SMART)	Gary O. Phillips Maribeth Bushey (Alt)	
<del>Marin County Homeless Policy Steering Committee</del>	<del>Kate Colin</del> <del>Gary Phillips (Alt)</del>	
County Priority-Setting Committee (re: Community Development Block Grant Funds – CDBG)	John Gamblin Kate Colin (Alt)	
Marin Energy Authority (MEA)	Andrew McCullough John Gamblin (Alt)	
Transportation Authority of Marin (TAM) Board of Commissioners	Gary O. Phillips Kate Colin (Alt)	
Transportation Authority of Marin (TAM) - Safe Routes to Schools Program	Kate Colin	
County of Marin - Las Gallinas Watershed Program	John Gamblin	
<b>City Council Standing Committees, Adhoc Subcommittees &amp; Liaisons 2018</b>		
<b>City Council Standing Committees (Noticed public meetings)</b>		
Economic Development Committee	<del>John Gamblin (C)</del> Gary O. Phillips (C)	<u>Kate Colin</u>
Finance Committee	Gary O. Phillips (C) John Gamblin	
Federation/Coalition of San Rafael Neighborhoods (Noticed Joint Committee/City Council meeting)	Gary O. Phillips (C) John Gamblin (1 <sup>st</sup> Alt) Kate Colin (Alt)	
City/School Liaison Committee (Noticed Joint City Council /Schools meeting)	Gary O. Phillips John Gamblin	
General Plan 2040 Steering Committee	Maribeth Bushey Kate Colin (Alt)	

<b>City Council Standing Committees, Adhoc Subcommittees &amp; Liaisons cont. 2018</b>		
<b>City Council Adhoc Subcommittees</b> (Not subject to Brown Act)		
Adhoc City/County Liaison Committee	Gary O. Phillips (C) Kate Colin	
Adhoc Pension/Other Post-Employment Benefits (OPEB) Subcommittee	Gary O. Phillips (C) <del>Andrew McCullough</del>	<a href="#">John Gamblin</a>
Adhoc SMART Subcommittee	Gary O. Phillips (CC) Maribeth Bushey (CC)	
Adhoc Homelessness Subcommittee	Gary O. Phillips <del>Kate Colin (C)</del>	<a href="#">John Gamblin (C)</a>
Adhoc Facilities Subcommittee	Gary O. Phillips (C) Andrew McCullough	
New Library Adhoc Subcommittee	Maribeth Bushey (C) Andrew McCullough	
Adhoc Multi-Use Path Subcommittee	Andrew McCullough (C) Gary O. Phillips	
Adhoc Latino Civic Leadership Initiative	Kate Colin Gary O. Phillips (Alt)	
Adhoc Mayor's Advisory Group (Canal Advisory)	Gary O. Phillip John Gamblin	
<b>Council Liaisons to City of San Rafael, Boards, Commissions and Committees</b> (Open, noticed meetings)		
ADA Access Advisory Committee	John Gamblin	
Bicycle and Pedestrian Advisory Committee	Kate Colin	
Board of Library Trustees	Maribeth Bushey	
Business Improvement District Advisory Group	John Gamblin	
Economic Development and Affordable Housing Citizens Advisory Committee "CAC"	John Gamblin	
Design Review Board	Andrew McCullough	
Fire Commission	Gary O. Phillips Andrew McCullough	
Measure "E" Citizens Oversight Committee	Gary O. Phillips	
Park and Recreation Commission	John Gamblin	

Planning Commission	Gary O. Phillips	
Pickleweed Advisory Board	Kate Colin	
Special Library Parcel Tax “Measure C” Committee	Maribeth Bushey	
Climate Change Action Plan Quarterly Update Forum	Kate Colin	
Library Foundation Board	Maribeth Bushey	

<b>Joint Powers Agreement (JPA)</b>		<b>2018</b>
Marin County Animal Control	Jim Schutz	
Marin County Hazardous and Solid Waste Joint Powers Authority Board and Executive Committee	Jim Schutz Cristine Alilovich (Alt)	
Marin Emergency Radio Authority (MERA) Governing Board	Diana Bishop Ralph Pata (Alt) Robert Sinnott (Alt)	
Marin Emergency Radio Authority (MERA) Executive Board 9/2018	Christopher Gray	
Marin General Services Authority	Jim Schutz Cristine Alilovich (Alt)	
Marin Telecommunications Agency	Andrew McCullough Maribeth Bushey (Alt)	
<b>Marin County Council of Mayors &amp; Councilmembers (MCCMC)</b>		
Legislative Committee	Maribeth Bushey	
Marin Transit District	Kate Colin	
Homeless Policy Maker Group	<del>Kate Colin</del>	<a href="#"><u>John Gamblin</u></a>
Sea Level Rise Subcommittee	Kate Colin	
Pension	<del>Andrew McCullough</del> Gary Phillips (Alt)	<a href="#"><u>John Gamblin</u></a>
Disaster Preparedness	Maribeth Bushey John Gamblin (Alt)	

Updated- December ~~113, 2017~~2018

**ORDINANCE NO. 1965**

**AN ORDINANCE OF THE CITY OF SAN RAFAEL AMENDING CHAPTER 3.28  
OF THE SAN RAFAEL MUNICIPAL CODE REGARDING THE PARAMEDIC  
SERVICE SPECIAL TAX**

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**THE CITY COUNCIL OF THE CITY OF SAN RAFAEL DOES ORDAIN AS FOLLOWS:**

**DIVISION 1. FINDINGS.**

**WHEREAS**, in 1979 the voters of the City of San Rafael enacted Chapter 3.28 of the San Rafael Municipal Code establishing a Paramedic Service Special Tax on residential units in San Rafael, to generate funds for the provision of paramedic services; and

**WHEREAS**, in 1988, the voters of the City of San Rafael extended the Paramedic Service Special Tax to also apply to nonresidential structures in the City; and

**WHEREAS**, the City's practice in administering the Paramedic Service Special Tax has been to consider individual taxpayer requests for reduction or elimination of the assessed amount of the paramedic tax on a property where, because a structure is unoccupied or substantially under-occupied, the property is unlikely to require the assumed amount of paramedic services; and

**WHEREAS**, the City Council wishes to formalize this existing administrative practice by including it in the Municipal Code;

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SAN RAFAEL DOES ORDAIN AS FOLLOWS:**

**DIVISION 2. CODE AMENDMENT.**

Section 3.28.080 of the San Rafael Municipal Code is hereby adopted to read as follows:

**3.28.80 Adjustment of tax.**

(a) Any taxpayer may, by June 15, file a written request the city manager to reduce or eliminate the Paramedic Service Special Tax for the forthcoming fiscal year. The city manager shall grant the request in full or part, to the extent that the taxpayer establishes to his or her reasonable satisfaction any of the following:

- a. A nonresidential structure or residential unit will be unoccupied during substantially the entirety of the forthcoming fiscal year;
- b. A nonresidential structure or residential unit is slated for demolition;
- c. A nonresidential structure is fit for occupancy by significantly fewer persons than the California Fire Code authorizes for the structure as a whole due to damage, construction, or other obstructions to use such that

the tax should be reduced to reflect a lower potential demand for paramedic services; or

d. The law otherwise requires the application to be granted in whole or part.

(b) The city manager or designee shall determine the application in writing after an oral or paper hearing based upon such evidence as the taxpayer may submit or is otherwise available. This decision will be final as to the City but is subject to judicial review pursuant to Code of Civil Procedure section 1094.5. The city manager or designee shall inform the county tax collector of any approval in time for preparation of the tax roll for the coming fiscal year.

### **DIVISION 3. CEQA FINDINGS.**

This Ordinance is not a project within the meaning of Section 15378 of the California Environmental Quality Act (CEQA) Guidelines because it has no potential to result in physical change in the environment, directly or indirectly. If this Ordinance is found to be a project under CEQA, it is exempt under CEQA Guideline 15061(b)(3) because it can be seen with certainty that there is no possibility that the Ordinance may have a significant effect on the environment.

### **DIVISION 4. CONSTRUCTION.**

(a) Severability. If any section, subsection, sentence, clause, phrase or portion of this Ordinance or its application to any person or circumstance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance or its application to other persons and circumstances. The City Council of the City of San Rafael hereby declares it would have adopted this Ordinance and each section, subsection, sentence, clause, phrase or portion thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, phrases, or portions be declared invalid or unconstitutional and, to that end, the provisions hereof are hereby declared to be severable.

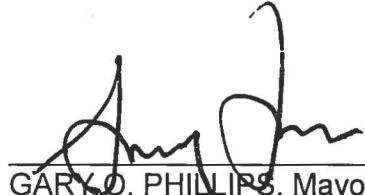
(b) Declaratory of Existing Law. The City Council declares that the amendment to the San Rafael Municipal Code effected by this Ordinance codifies the existing practice of the City and is therefore declaratory of existing law.

### **DIVISION 4. PUBLICATION. EFFECTIVE DATE:**

This Ordinance shall be published once, in full or in summary form, before its final passage, in a newspaper of general circulation, published, and circulated in the City of San Rafael, and shall be in full force and effect thirty (30) days after its final passage. If published in summary form, the summary shall also be published within fifteen (15) days after the adoption, together with the names of those Councilmembers voting for or against same, in a newspaper of general circulation published and circulated in the City of San



Rafael, County of Marin, State of California.

  
GARY O. PHILLIPS, Mayor

ATTEST:

  
LINDSAY LARA, City Clerk

The foregoing Ordinance No.1965 was read and introduced at a Regular Meeting of the City Council of the City of San Rafael, held on the 19<sup>th</sup> day of November 2018 and ordered passed to print by the following vote, to wit:

AYES: Councilmembers: Bushey, Colin, Gamblin & Mayor Phillips

NOES: Councilmembers: None

ABSENT: Councilmembers: McCullough

and will come up for adoption as an Ordinance of the City of San Rafael at a Regular Meeting of the Council to be held on the 3rd day of December, 2018.

  
LINDSAY LARA, City Clerk

# Marin Independent Journal

4000 Civic Center Drive, Suite 301  
San Rafael, CA 94903  
415-382-7335  
legals@marinij.com

2070419

CITY OF SAN RAFAEL  
CITY OF SAN RAFAEL  
CITY CLERK, ROOM 209  
1400 FIFTH AVENUE, SAN RAFAEL, CA 94901  
SAN RAFAEL, CA 94915-1560

## PROOF OF PUBLICATION (2015.5 C.C.P.)

### STATE OF CALIFORNIA County of Marin

I am a citizen of the United States and a resident of the County aforesaid: I am over the age of eighteen years, and not a party to or interested in the above matter. I am the principal clerk of the printer of the MARIN INDEPENDENT JOURNAL, a newspaper of general circulation, printed and published daily in the County of Marin, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Marin, State of California, under date of FEBRUARY 7, 1955, CASE NUMBER 25566; that the notice, of which the annexed is a printed copy (set in type not smaller than nonpareil), has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

**11/23/2018**

I certify (or declare) under the penalty of perjury that the foregoing is true and correct.

Dated this 26th day of November, 2018.



Signature

## PROOF OF PUBLICATION

Legal No. **0006258628**

### SUMMARY OF ORDINANCE NO. 1965

#### AN ORDINANCE OF THE CITY OF SAN RAFAEL AMENDING CHAPTER 3.28 OF THE SAN RAFAEL MUNICIPAL CODE REGARDING THE PARAMEDIC SERVICE SPECIAL TAX

This Summary concerns a proposed ordinance of the City Council of the City of San Rafael, designated as Ordinance No. 1965, which will amend Chapter 3.28 of the San Rafael Municipal Code. Ordinance No. 1965 is scheduled for adoption by the San Rafael City Council at its regular meeting of December 3, 2018. The City Clerk has been directed to publish this Summary pursuant to City Charter and California Government Code section 36933(c)(1).

### SUMMARY OF AMENDMENT TO MUNICIPAL CODE

The Ordinance will amend Chapter 3.28 of the San Rafael Municipal Code concerning the City's Paramedic Service Special Tax. This tax is imposed on property with structures, not on unimproved property. The tax is imposed at a flat rate per residential unit, on the assumption that each residential unit will require approximately the same amount of paramedic services. On nonresidential structures, the tax is imposed at a set amount per square foot, on the assumption that larger nonresidential structures place a higher demand on the paramedic services than do smaller structures. The ordinance will add new Section 3.28.080 to codify an existing administrative practice of the City to consider requests for reduction or elimination of the Paramedic Service Special Tax to be assessed against a taxpayer's structure in the next tax year, where it can be demonstrated that during substantially all of the year the structure will be unoccupied, or will be demolished, or is a nonresidential structure that will be fit for occupancy by significantly fewer persons than otherwise allowed due to damage, construction, or other obstructions to use such that the tax should be reduced to reflect a lower potential demand for paramedic services. This ordinance is declaratory of existing law.

Copies of Ordinance No. 1965 will be available for public review as of Wednesday, December 28, 2018, at the San Rafael City Clerk's Office, 1400 Fifth Avenue, 2nd Floor, Room 209 during regular business hours, 8:30 a.m. to 5:00 p.m., and on the City's website: <https://www.cityofsanrafael.org>. You may also contact the City Clerk at (415) 485-3066 or the Planning Department at (415) 485-3085 for information.

LINDSAY LARA  
San Rafael City Clerk  
Dated: 11/23/2018

No. 1685 Nov. 23, 2018



**SAN RAFAEL CITY COUNCIL AGENDA REPORT**

Department: Community Development

*Paul A. Jensen*

Prepared by: Paul A. Jensen (CP)  
Community Development Director

City Manager Approval: \_\_\_\_\_

*[Signature]*

**TOPIC: 21 G STREET PROJECT BELOW-MARKET-RATE HOUSING (BMR) AGREEMENT**

**SUBJECT: RESOLUTION AUTHORIZING THE CITY MANAGER TO EXECUTE A BELOW-MARKET-RATE HOUSING (BMR) AGREEMENT FOR THE 21 G STREET RESIDENTIAL DEVELOPMENT PROJECT**

**RECOMMENDATION:**

Adopt a resolution authorizing the City Manager to execute a BMR Agreement.

**BACKGROUND:**

San Rafael Municipal Code Section 14.16.030 (Zoning- Affordable Housing) requires that all new development contribute to the City's affordable housing stock. These code provisions, which are rooted in San Rafael General Plan 2020 Housing Element Policy H-19, require that a percentage of residential units in new market rate housing development be set aside for below-market rate sale or rental. The City's Below-Market-Rate Housing (BMR) Program requires that these units remain affordable for the longest feasible time, or at least 55 years. The City's BMR Program is managed by the [Marin Housing Authority](#) (MHA). MHA works with the City and the developer/applicant to structure and negotiate the sale or rental terms in a form of a BMR Agreement. Such agreements are executed between three parties -- the City, MHA and the developer/applicant.

In 2016, the City approved a new residential development of eight (8), attached townhouse units at 21 G Street. City approvals included an Environmental and Design Review Permit, Variance, as well as a Vesting Tentative Map. These approvals were recently extended by the Planning Commission. The approval of the Vesting Tentative Map authorizes the units to be sold for individual ownership.

Consistent with the City housing regulations and policies, the project was conditionally approved to set aside one of the eight units for BMR sale priced for a low-income household (60-80% of the median household income). MHA and the City have negotiated with the developer/applicant to select the unit, which is a two-bedroom townhome suitable for a three-person household. The BMR purchase price for the unit would be set at \$221,600. With the affordability target at low-income (60% of the median household income), a household of three persons would qualify to purchase the unit if its annual income

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**FOR CITY CLERK ONLY**

File No.: \_\_\_\_\_

Council Meeting: \_\_\_\_\_

Disposition: \_\_\_\_\_

is \$63,930. The BMR Agreement (attached) outlines the unit price, eligible household affordability, and resale restrictions. The developer/applicant agrees with and has signed the BMR Agreement.

**ANALYSIS:**

The BMR unit and the BMR Agreement (as drafted) are consistent with the San Rafael General Plan 2020 Housing Element Policy H-19 and the affordable housing provisions of the City municipal code. Further, the BMR Agreement implements a required condition of approval for the 21 G Street housing project.

**COMMUNITY OUTREACH:**

As this BMR Agreement is fulfilling a condition of approval on an approved development project, no special notification or special outreach was administered. The BMR requirement was fully reviewed, vetted and approved as part of a publicly-noticed process followed by the Planning Commission.

**FISCAL IMPACT:**

The City bears no cost for constructing or providing the BMR unit. The City's fiscal impact in connection with this project lies with the cost of having MHA administer the City's BMR Program, which includes administering the sale of this unit. The cost of this administration is fully appropriated in the City budget and paid through Fund 243 (Affordable Housing In-lieu Fee Fund).

**OPTIONS:**

The City Council has the following options to consider on this matter:

1. Adopt the resolution as recommended by staff.
2. Continue the matter and direct staff to return with more information.
3. Take no action.

**RECOMMENDED ACTION:**

Adopt a resolution authorizing the City Manager to execute a BMR Agreement for recordation.

**ATTACHMENTS:**

1. Resolution
2. Exhibit A to Resolution: BMR Agreement

# **ATTACHMENT 1**

**RESOLUTION NO. \_\_\_\_\_**

## **RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SAN RAFAEL AUTHORIZING THE CITY MANAGER TO EXECUTE A BELOW MARKET RATE HOUSING AGREEMENT FOR A FOR-SALE OWNERSHIP RESIDENTIAL UNIT AT 21 G STREET (APN 011-232-10)**

**WHEREAS**, on February 25, 2014, the San Rafael Planning Commission adopted Resolution No. 14-03 conditionally approving the proposed Environmental and Design Review Permit (ED 12-058), Variances (V12-002), Tentative Map (TS13-002), and Exception (EX13-008) to allow for the subdivision of the existing parcel at 21 G Street, San Rafael into 8-lots to create 8 residential townhouse units, including one (1) two bedroom unit affordable to a low income household; and

**WHEREAS**, on March 5, 2014, a timely appeal was received of the Planning Commission approvals of February 25, 2014; and

**WHEREAS**, on June 16, 2014 the City Council held a duly noticed public hearing on the appeal and ultimately voted to adopt Resolution No. 13746 upholding the Planning Commission decision; and

**WHEREAS**, the approved Environmental and Design Review Permit (ED12-058), Tentative Map (TS13-002), Variance (V12-002), and Subdivision Exception (EX13-008) provided the applicant/developer with a two-year time frame within which to obtain the required Building Permits and commence construction. The two-year approval was set to expire on June 16, 2016 and the applicant submitted a request for a time extension on February 22, 2016, prior to the expiration date; and

**WHEREAS**, on July 26, 2016 and October 9, 2018, the San Rafael Planning Commission held duly-noticed public hearings on two extension requests for the Environmental and Design Review Permit, Tentative Map, Variance and Subdivision Exception approvals, accepting all oral and written public testimony and the written report of the Community Development Department staff and closed said hearing on that date. The second extension granted on October 9, 2018 established a new expiration date of June 16, 2019 provided that a building/grading permit is issued, and construction commences by this date; and

**WHEREAS**, with the project approvals, the developer agreed to restrict one (1) of the residential units to be affordable to a low-income household set at 60% of the County of Marin median income. The conditions of approval for the Environmental and Design Review Permit (ED18-021) require that the developer enter into a Below Market Housing Agreement with the City of San Rafael and the Marin Housing Authority; and

**WHEREAS**, a Below Market Rate Housing Agreement has been drafted and all parties concur with the terms of the draft agreement.

**NOW THEREFORE BE IT RESOLVED** that the City Manager is authorized to execute, on behalf of the City of San Rafael, a Below Market Rate Housing Agreement for the property located at 21 G Street in San Rafael in the form attached hereto as Exhibit A, subject to final approval as to form by the City Attorney.

**ATTACHMENT 1**

I, Lindsay Lara, City Clerk of the City of San Rafael, hereby certify that the foregoing resolution was duly and regularly introduced and adopted at a regular meeting of the City Council held on the 3<sup>rd</sup> day of December 2018, by the following vote, to wit:

AYES:            COUNCILMEMBERS:

NOES:           COUNCILMEMBERS:

ABSENT:        COUNCILMEMBERS:

\_\_\_\_\_  
LINDSAY LARA, City Clerk

No recording fee per G.C. 27383

**ATTACHMENT 2**

*Recording Requested by:*

Housing Authority of the County of Marin

*When Recorded Return to:*

Housing Authority of the County of Marin

Attention: BMR Department

4020 Civic Center Drive

San Rafael, CA 94903

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**BELOW MARKET RATE HOUSING AGREEMENT AND  
DECLARATION OF RESTRICTIVE COVENANTS**  
(Ownership Units)

**Development Name:** 21 G Street

**Affordable Unit Property Address:** TBD (Parcel and Site Plan attached) APN: 011-232-10  
21 G Street, San Rafael, CA 94901

**Developer:** 21 G Street, LLC

This Below Market Rate Housing Agreement and Declaration of Restrictive Covenants (the "Agreement") is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 2018, among the **CITY OF SAN RAFAEL**, a municipal corporation ("City"), the **HOUSING AUTHORITY OF THE COUNTY OF MARIN**, a public body, corporate and politic, created under the Housing Authority Law of the State of California ("Marin Housing Authority"), and **21 G STREET, LLC**, a California limited liability company, or any successor in interest ("Developer"), collectively the "Parties," with reference to the following:

- A. Developer is the fee owner of that certain property located at 21 G Street in the City of San Rafael, County of Marin, California (the "Property"). The City has approved a development on the Property consisting of eight condominium units (the "Development").
- B. The City has adopted affordable housing requirements contained in the Zoning Ordinance Section 14.16.030 of the San Rafael Municipal Code (the "Affordable Housing Requirements"). The Developer is required to provide one or more affordable units pursuant to the Affordable Housing Requirements and San Rafael Planning Commission Resolution No. 14-03 adopted on February 25, 2014. Resolution 14-03 conditionally approved the proposed Environmental and Design Review Permit (ED 12-058), Variances (V12-002), Tentative Map (TS 13-002), and Exception (EX 13-008) to allow for the subdivision of the existing parcel into 8-lots to create 8 residential townhouse units; including one affordable unit.
- C. The Planning Commission subsequently approved Resolution No. 16-14 on July 20, 2014 providing for a two year time extension.

10/30/2018

- D. On October 9, 2018, the Planning Commission adopted Resolution No. 18-11, conditionally approving an additional time extension for the Environmental and Design Review Permit (ED18-021), Variance (V18-006), Tentative Map (TS18-001) and Subdivision Exception (EX18-003) to construct eight (8) new townhomes and one (1) common open space parcel for shared outdoor recreation space, and establishing a new expiration date of June 16, 2019 provided that a building/grading permit is issued, and construction commenced, by June 16, 2019.

One of the conditions of ED 18-021 is for the developer to enter into a Below Market Housing Ownership Agreement with the City of San Rafael.

- E. Marin Housing Authority is authorized by law to participate in programs that provide housing for households of very low, low, and moderate income and is by experience qualified to screen and determine the eligibility of applicants for very low, low, and moderate income housing.
- F. The Parties hereto desire, by this Agreement, to cooperate in implementing the efforts of the Developer to comply with the Affordable Housing Requirements.

NOW THEREFORE, it is hereby agreed by and between the Parties hereto as follows.

#### AGREEMENT

The foregoing recitals are hereby incorporated by reference and made part of this Agreement.

Section 1. Definitions. In addition to those terms defined in the Recitals and elsewhere in this Agreement, the following terms are specially defined for the purposes of this Agreement:

"Affordable Ownership Price" means a sales price calculated by the Marin Housing Authority that includes a reasonable down payment and results in a Monthly Housing Payment during the first calendar year of a household's occupancy that (i) for Low Households is equal to or less than one-twelfth (1/12) of thirty-three percent (33%) of sixty percent (60%) of Area Median Income, as adjusted for Assumed Household Size. The calculations and methodology used to determine the Affordable Ownership Price are illustrated in Exhibit "C" attached hereto.

(a) "Area Median Income" means median yearly income for the San Francisco Primary Metropolitan Statistical Area as determined by the United States Department of Housing and Urban Development, Office of Economic Affairs, Economic and Market Analysis Division, with adjustments for smaller or larger households.

(b) "Assumed Household Size" shall be a family of three (3) for a two bedroom unit.

(c) "Deed of Trust" means the deed of trust, in the form provided by the Marin Housing Authority, executed by each buyer of an Affordable Unit, securing the buyer's performance under the Resale Agreement.

(d) "Eligible Household" means a household that has been determined by the Marin Housing Authority to be eligible to purchase an Affordable Unit under guidelines adopted by the Marin Housing Authority and additionally is eligible under any special requirements for eligibility adopted by the City.



(e) "Monthly Housing Payment" is determined by the Marin Housing Authority and includes monthly payment of mortgage interest and principal, property taxes, mortgage insurance, homeowner's insurance, and homeowners' association dues paid by homeowners.

(f) "Resale Agreement" means the Resale and Refinancing Restriction Agreement and Option to Purchase, in the form provided by the Marin Housing Authority, executed by each buyer of an Affordable Unit, the City and Marin Housing Authority.

Section 2. Satisfaction of Affordable Housing Requirement. The Affordable Housing Requirements shall be satisfied with respect to the Development if: (a) the Developer constructs or causes to be constructed the Affordable Unit meeting the requirements of Sections 3 through 4 below, in compliance with the schedule set forth in Section 5 below; and (b) Developer sells the Affordable Unit to an Eligible Household in compliance with Sections 6 through 8 below.

Section 3. Number of Affordable Units. Developer shall construct, or cause to be constructed, one (1) two-bedroom Affordable Unit as shown in Exhibit B.

Section 4. Appearance, Size, and Bedroom Count. The Affordable Unit shall be of the same general design and exterior appearance as the Market Rate Units and of comparable quality of construction. Interior features of the Affordable Units shall be durable and of good quality. The Affordable Unit shall include two bedrooms.

Section 5. Schedule for Developing the Affordable Unit. Developer shall provide the Affordable Units pursuant to the following schedule:

(a) Prior to or concurrently with recordation of any final or parcel map or issuance of any building permit for the Development, this Agreement shall be duly executed by the City, Marin Housing Authority, and the Developer and recorded against the Affordable Unit.

(b) Building permit for the Affordable Unit shall be issued concurrently and on a pro rata basis with the Market Rate Units.

(c) Certificate of occupancy or final inspection for the Affordable Unit shall be issued concurrently and on a pro rata basis with the Market Rate Units.

Section 6. Sale of Affordable Unit to Eligible Household. The Developer shall sell the completed Affordable Unit to an Eligible Household at the Affordable Ownership Price established by the Marin Housing Authority as described in this Section. Developer shall make a good faith effort to market the Affordable Unit to Eligible Households.

(a) The Developer shall provide the Marin Housing Authority with written notice at least one hundred twenty (120) days before the issuance of any certificate of occupancy or approval of a final inspection for any dwelling unit in the Development or approval of any final inspection for an Affordable Unit.

(b) The Developer agrees that the Affordable Ownership Price for the Affordable Unit shall not exceed the prices set forth in Exhibit "C" attached hereto, unless modified by the Marin Housing Authority as described in subsections (c) and (d) below. Developer acknowledges and agrees that the Affordable Ownership Price as shown in Exhibit "C" has been calculated by Marin Housing

Authority in its reasonable discretion in interpreting the requirements of this Agreement and that any recalculation of the Affordable Ownership Prices by the Marin Housing shall be consistent with the methodology illustrated in Exhibit "C" and shall be binding on the Developer. The Affordable Ownership Price shall be the absolute maximum price that the Developer or any other seller may receive as compensation for the sale of an Affordable Unit. The Developer or other seller may not charge or receive any additional compensation for an Affordable Unit regardless of whether the additional amount is (i) for options, upgrades, or additional improvements to the unit, (ii) paid through escrow or outside of escrow, (iii) paid prior to, after, or as part of the purchase escrow, or (v) paid in cash or in kind to the Developer. The Affordable Ownership Price does not include proration of taxes, utilities, and homeowner's association fees, nor does it include such closing costs as insurance premiums, escrow costs, transfer taxes, recording fees, document preparation costs, or similar items.

(c) Recalculation of the Affordable Ownership Price shall be permitted at the time that the Developer provides written notice to Marin Housing Authority at least one hundred twenty (120) days prior to the issuance of any certificate of occupancy or approval of any final inspection for an Affordable Unit if: (i) the mortgage rate shown in Exhibit "C" is different from the then-current market interest rate; (ii) Area Median Income has changed from that set forth in Exhibit "C"; (iii) the final approved homeowners association dues are different from the estimate shown in Exhibit "C"; or (iv) the mortgage insurance estimate has changed from that set forth in Exhibit "C".

(d) Upon receipt of the Developer's 120-day notice, the Affordable Ownership Price shall be recalculated by Marin Housing Authority using: (i) the most affordable available mortgage rate for a thirty (30)-year, fixed-rate mortgage as determined by Marin Housing Authority; (ii) the current Area Median Income; (iii) the final approved homeowners association dues; and (iv) the current mortgage insurance estimate. Such an adjustment to the Affordable Ownership Price shall be allowed more than one time only if mutually agreed by all the Parties to this Agreement.

(e) Developer agrees to offer the Affordable Unit for sale only to an Eligible Household. Marin Housing Authority agrees to process applications and certify the eligibility of applicants. Selection of Eligible Households shall be determined by a drawing or other equitable method mutually agreed upon by the City and Marin Housing Authority and administered by the Marin Housing Authority. Developer shall not unreasonably delay its review and acceptance or rejection of any purchase offer submitted by an applicant supplied by Marin Housing Authority.

(f) In the event that an Affordable Unit is not sold one hundred twenty (120) days from the date of issuance of a certificate of occupancy for that Affordable Unit, the Developer may, in writing, offer the Affordable Unit for sale to the Marin Housing Authority or assignee at the Affordable Ownership Price. For the purposes of this Section 6, "sold" shall mean that the Developer and an Eligible Purchaser have entered into a purchase and sale agreement for that Affordable Unit. Within ten (10) working days after receipt of such written notice, Marin Housing Authority shall notify the Developer in writing whether or not it will purchase the Affordable Unit at the Affordable Ownership Price or whether it has assigned the offer to the City, another public agency, a non-profit organization, or an Eligible Purchaser. If Marin Housing Authority notifies the Developer that it or its assignee will purchase the Affordable Unit, the Developer shall execute a purchase and sale agreement and other documents described in Sections 7 and 8 below, as applicable, to sell the Affordable Unit to Marin Housing Authority or its assignee at the Affordable Ownership Price. Close of escrow shall take place on the date which is the later to occur of the following: (i) sixty (60) days after the date that the purchase and sale agreement is executed, or (b) ten (10) days after Developer has done all acts and executed all documents required for close of escrow, including but not limited to having sufficient units in the Development

presold to meet the requirements of lending agencies. The Developer shall convey title to the Affordable Unit at the close of escrow free and clear of any mortgage, lien, or other encumbrance, unless approved in advance in writing by the Marin Housing Authority or assignee.

(g) In the event that Marin Housing Authority declines to purchase the Affordable Unit or to assign the offer provided pursuant to subsection (f) of this Section within ten (10) working days after receipt of such written notice, the Affordable Unit may be sold by the Developer without restrictions as to price, and Sections 7 and 8 below will not apply to the sale of the Affordable Unit. To further the purpose of the Affordable Housing Requirements, which is to provide housing to all economic segments of the population, and to allow for sale of the Affordable Units while preventing a windfall to Developer if Developer fails to enter into purchase and sale agreements with Eligible Purchasers, in such event the Developer shall pay to the City at close of escrow one hundred percent (100%) of the difference between the sales price (less any real estate commissions not to exceed six percent (6%) of the sales price and normal closing costs) and the Affordable Ownership Price. The City shall pay to Marin Housing Authority ten percent (10%) of this sum for administrative costs related to administration of the City's Affordable Housing Requirements and shall utilize the remaining amount to provide housing affordable to very low, low, and moderate income households. Following payment of all sums due to the City, the City and Marin Housing Authority shall release the Affordable Unit from this Agreement as specified in Section 9.

Section 7. Marin Housing Authority and City Approval of Homebuyer Documents. Approval of the following documents by the Marin Housing Authority shall be required prior to the offering for sale of the Affordable Units.

(a) Form of Purchase and Sale Agreements for the Affordable Units (to be prepared by Developer and submitted to the Marin Housing Authority). Purchase and sale agreements between Developer and Eligible Households shall include requirements that: (i) Eligible Households shall execute documents for the benefit of the City and Marin Housing Authority as described in Section 8 below; and (ii) Marin Housing Authority shall be paid a transaction fee of two percent (2%) of the Affordable Ownership Price, such fee to be paid in equal shares by the Developer and by the Eligible Household at close of escrow. Except for terms required to effectuate this Agreement, the Affordable Unit shall be offered to Eligible Purchasers on the same terms as the Market Rate Units are offered to purchasers.

(b) Form of Resale Agreement, Deed of Trust, Request for Notice of Default and Sale, and Borrower's Disclosure, and Notice of Affordability Restrictions, if required (to be prepared by the Marin Housing Authority, following Developer's 120-day notice to Marin Housing Authority).

(c) The preliminary Department of Real Estate public report for the Development, including the Affordable Unit (to be obtained by the Developer and submitted to the Marin Housing Authority).

(d) Developer's form escrow instructions (to be prepared by the Developer and submitted to the Marin Housing Authority).

(e) All such documents shall also be submitted to the City for review and approval.

Section 8. Homebuyer Documents and Security Instruments. Prior to the sale of the Affordable Unit, Developer shall ensure that:

(a) The Eligible Household, the City, and the Marin Housing Authority execute the Resale Agreement in the form provided by the Marin Housing Authority. The escrow instructions shall stipulate that the Resale Agreement shall be recorded against the Affordable Unit at close of escrow on the sale to the Eligible Household; and that the Resale Agreement shall be recorded junior only to the lien of the deed of trust securing the Eligible Household's first mortgage loan, or to a second mortgage loan only if such loan is provided by a public agency which requires such subordination, or as otherwise approved in writing by the Marin Housing Authority.

(b) The Eligible Household signs the Deed of Trust to secure performance of the Eligible Household's covenants under the Resale Agreement. The Deed of Trust shall be recorded against the Affordable Unit, subordinate only to the Resale Agreement and the lien of the deed of trust securing the Eligible Household's first mortgage loan or to a second mortgage loan only if such loan is provided by a public agency which requires such subordination, or as otherwise approved in writing by the Marin Housing Authority.

(c) A Request for Notice of Default and Sale is recorded for each deed of trust recorded at close of escrow.

(d) The Eligible Household signs the Borrower's Disclosure in the form provided by the Marin Housing Authority.

(e) If required, the Eligible Household and the City sign the Notice of Affordability Restrictions.

Within five (5) days following closing of the sale of any Affordable Unit, Developer shall forward to the Marin Housing Authority copies of the buyer's and seller's settlement statement and all closing documents, including Resale Agreement, Deed of Trust, Request(s) for Notice of Default and Sale, and Borrower's Disclosure, and Notice of Affordability Restrictions, if required, executed in connection with the sale. Developer shall retain all records related to compliance with obligations under this Agreement and the Affordable Housing Requirements for a period not less than two (2) years from the date of sale of all units in the Development and make them available on five (5) business days' written notice to Marin Housing Authority or City employees or others designated by the Marin Housing Authority or City for the purposes of inspection and copying.



Section 9. Release of Property From Agreement.

(a) Covenant Running with the Land. The covenants and conditions herein contained shall apply to and bind, during their respective periods of fee ownership, Developer and its heirs, executors, administrators, successors, transferees, and assignees having or acquiring any right, title or interest in or to any part of the Affordable Unit Property, whether by operation of law or in any manner whatsoever, and shall run with and burden the Affordable Unit Property in perpetuity until terminated in accordance with this Section. All of the provisions of this Agreement shall be enforceable as equitable servitudes and shall constitute covenants running with the land pursuant to applicable laws, including without limitation Section 1468 of the California Civil Code. Each covenant to do, or to refrain from doing, some act on the Affordable Unit Property hereunder (a) is for the benefit of the Affordable Unit Property and is a burden on the Affordable Unit Property, (b) runs with the Affordable Unit Property, and (c) is binding upon each Party and each successive owner during its ownership of the Affordable Unit Property or any portion thereof, and shall be a benefit to and a burden upon each Party and the Affordable Unit Property hereunder and each other person or entity succeeding in an interest to the Affordable Unit Property.

(b) Until the Affordable Unit Property is released from the burdens of this Agreement pursuant to this Section, any owners of fee title to the Affordable Unit Property and the Development shall expressly make the conditions and covenants contained in this Agreement a part of any deed or other instrument conveying any interest in the Affordable Unit Property. Any deed transferring any fee interest in the Affordable Unit Property shall include the following language:

**NOTICE:** THE SALES PRICE FOR THIS PROPERTY IS RESTRICTED BY THE CITY OF SAN RAFAEL TO PERSONS MEETING CERTAIN FEDERAL, STATE AND/OR CITY ELIGIBILITY REQUIREMENTS. FOR MORE INFORMATION, SEE THE AGREEMENT RECORDED AGAINST THIS PROPERTY OF EVEN DATE HERewith. THESE RESTRICTIONS BIND ALL HEIRS AND SUCCESSORS TO THIS DEED.

(c) Affordable Units Offered for Sale. the Affordable Unit Property shall be released from the burdens of this Agreement when it is: (i) sold to an Eligible Household in compliance with this Agreement; and (ii) a Resale Agreement, Deed of Trust, Request for Notice of Default, and, if required, Notice of Affordability Restrictions, are recorded against the Affordable Unit. The form of the release is included in Exhibit "D".

(d) Release Upon Approval of the City. In the event the Development is not constructed and approvals for the Development expire, or the City modifies the conditions of approval for the Development such that no Affordable Unit is required in the Development, or the Affordable Unit is sold pursuant to the provisions of Section 6(g), this Agreement shall be released from record against the Affordable Unit Property. The form of the release is included in Exhibit "D".

Section 10. Non-Discrimination. Developer shall not discriminate against persons or groups of persons on account of race, color, religion, creed, sex, sexual orientation, marital status, familial status, ancestry or national origin in the use, sale, transfer, occupancy, lease, tenure or enjoyment of the Affordable Unit Property, nor shall Developer or any person claiming under or through Developer establish or permit any such practice or practices of discrimination or segregation with respect to use or occupancy of the Affordable Unit Property. Developer shall ensure that language prohibiting such discrimination shall be included in any and all deeds, leases and contracts executed by Developer or its successors with respect to the Affordable Unit Property.

Section 11. Default and Remedies. Failure of the Developer to cure any default in the Developer's obligations under the terms of this Agreement within thirty (30) days after the delivery of a written notice of default from the Marin Housing Authority or the City (or such longer period of time up to an additional one hundred twenty (120) days as may be necessary to remedy such default, provided that the Developer has commenced action during the thirty (30) days necessary to remedy such default, and the Developer is proceeding with reasonable diligence to remedy such default) will constitute a default under this Agreement and the Affordable Housing Requirements, and, in addition to any other remedy authorized by law or equity for breach of this Agreement, Marin Housing Authority and/or the City, as applicable, may exercise any and all remedies available to it with respect to the Developer's failure to satisfy the terms of this Agreement and the Affordable Housing Requirements, including but not limited to:

(a) on the part of the City, withholding, conditioning, suspending, or revoking any permit, license, subdivision approval or map, or other entitlement for the Development, including without limitation final inspections for occupancy and/or certificates of occupancy;

(b) on the part of the City, exercising any remedies available under the Subdivision Map Act, the Affordable Housing Requirements, the City's Municipal Code, or otherwise, with respect to the Developer's failure to satisfy the terms of this Agreement and the Affordable Housing Requirements;

(c) on the part of the City and/or the Marin Housing Authority, instituting against the Developer, or other parties, a civil action for declaratory relief, injunction or any other equitable relief, or relief at law, including without limitation an action to rescind a transaction and/or to require repayment of any funds received in connection with such a violation; and

(d) on the part of the City and/or the Marin Housing Authority, where one or more persons have received a financial benefit as a result of violation of this Agreement or of any requirement imposed under the Affordable Housing Requirements, assessing, and instituting legal action to recover as necessary, a penalty in any amount up to and including the amount of financial benefit received, in addition to recovery of the benefit received.

Section 12. Remedies Cumulative. No right, power, or remedy given to the Marin Housing Authority or to the City by the terms of this Agreement or the Affordable Housing Requirements is intended to be exclusive of any other right, power, or remedy; and each and every such right, power, or remedy shall be cumulative and in addition to every other right, power, or remedy given to the Marin Housing Authority and the City by the terms of any such document, the Affordable Housing Requirements, or any statute or otherwise against Developer and any other person. Neither the failure nor any delay on the part of the Marin Housing Authority or the City to exercise any such rights and remedies shall operate as a waiver thereof, nor shall any single or partial exercise by the Marin Housing Authority or the City of any such right or remedy preclude any other or further exercise of such right or remedy, or any other right or remedy.

Section 13. Attorneys Fees and Costs. If the Marin Housing Authority, the City, or the Developer is required to initiate legal proceedings at law or equity to enforce its rights under this Agreement, the prevailing Party in such action shall be entitled to an award of reasonable attorneys' fees and costs in addition to any other recovery under this Agreement. Whether or not litigation is instituted, Marin Housing Authority and the City shall be entitled to receive from any person violating this Agreement, in addition to any remedy otherwise available under this Agreement, the costs of enforcing this Agreement including without limitation reasonable attorney's fees and costs of the Marin Housing Authority and City staff.

Section 14. Hold Harmless and Indemnification. Developer will indemnify and hold harmless (without limit as to amount), with counsel approved by Marin Housing Authority and/or City, as applicable, Marin Housing Authority and City and their elected officials, officers, employees, and agents in their official capacity (hereinafter collectively referred to as "Indemnitees"), and any of them, from and against all claims, damages, losses, liabilities, actions, causes of action, expenses, and demands whatsoever, including without limitation attorney's fees arising out of the performance of this Agreement (collectively "Claims"), arising out of or relating in any manner as a result of or in connection with Developer's construction, sale, management, or operation of the Development and/or, the Affordable Units, and/or Developer's performance or non-performance of any obligation as and when required by this Agreement, caused in whole or part by any negligent act or omission of the Developer, except where caused by the gross negligence or willful misconduct of the Marin Housing Authority and/or the City, and shall protect and defend Indemnitees, and any of them with respect thereto. The provisions of this Section 14 shall survive expiration or other termination of this Agreement or any release of part or all of the Property from the burdens of this Agreement, and the provisions of this Section 14 shall remain in full force and effect.

Section 15. Notices. All notices required by this Agreement shall be made by certified mail, return receipt requested, or by express delivery service with a delivery receipt, and shall be deemed to have been delivered as of the date received or the date delivery was refused as indicated on the return receipt, if sent to the following addresses:

To the City: City of San Rafael  
Attention: City Manager  
1400 Fifth Avenue  
San Rafael, CA 94901

To Marin Housing Authority: Marin Housing Authority  
Attention: Executive Director  
4020 Civic Center Drive  
San Rafael, CA 94903-4173

To the Developer: 21 G Street, LLC  
Attention: Arvand Sabetian  
1550 G Tiburon Blvd. #343  
Tiburon, CA 94920

Any Party may change the address to which notices are to be sent by notifying the other Parties of the new address, in the manner set forth above.

Section 16. Integrated Agreement. This Agreement constitutes the entire Agreement between the Parties and supersedes any and all prior arrangements and understandings between the Parties, and no other agreement, statement, or promise made by the Parties which is not contained in this Agreement shall be binding or valid. No modification of this Agreement shall be binding unless reduced to writing and signed by the Parties.

Section 17. Amendment of Agreement. This Agreement shall remain in effect for so long as the Property is subject to inclusionary housing obligations pursuant to the Affordable Housing Requirements, unless released pursuant to Section 9. This Agreement, and any section, subsection, or covenant contained herein, may be amended only upon the written consent of the City, Marin Housing Authority, and Developer.

Section 18. Transferees, Successors and Assigns. All the terms and provisions of this Agreement shall be binding upon and inure to the benefit of and be enforceable by the heirs, successors, assigns and personal representatives of the Parties hereto. No transfer, sale, or assignment of Developer's rights, interests and obligations under this Agreement to another ("Transferee") hereunder shall occur without prior written notice to City and approval by the City Manager, which approval shall not be unreasonably withheld or delayed. The City Manager shall consider and decide on any transfer, sale or assignment within seven (7) calendar days after receipt of Developer's notice thereof, provided that all necessary documents, certifications and other information is provided to enable the City Manager to determine whether the proposed Transferee can perform Developer's assigned obligations hereunder. Provided that such sale, transfer or assignment has been approved by the City Manager and that Developer's obligations hereunder are expressly assumed by Transferee, Developer shall be released from any obligations hereunder sold, assigned or transferred to the Transferee. Notwithstanding any such grant, transfer, sale, assignment or other conveyance, this Agreement shall burden the Affordable Unit Property in perpetuity unless released pursuant to Section 9.

Section 19. No Joint Venture or Partnership. Nothing contained in this Agreement or any document executed pursuant to this Agreement shall be construed as creating a joint venture or partnership or association or relationship of principal and agent between Marin Housing Authority, City, and Developer. Nothing contained in this Agreement shall create or justify any claim against the Marin Housing Authority or City by any person that Developer may have employed or with whom Developer may have contracted relative to the purchase of materials, supplies or equipment, or the furnishing or the performance of any work or services with respect to the Property or the construction of the Development. The relationship of the Parties is that of governmental agencies and governed entity; furthermore, the Parties to this Agreement understand that this Agreement is in furtherance of the inherent power of City to regulate density and the use of land within the City's jurisdiction.

Section 20. Applicable Law and Venue. This Agreement shall be governed by California law. Venue for any dispute arising out of this Agreement shall be Marin County.

Section 21. Government Standards. In the event any standard established and maintained by any governmental agency which is necessary to give effect to this Agreement ceases to exist, and no comparable replacement is issued, the City and Marin Housing Authority shall create a replacement standard utilizing the formula and factors previously used to create the discontinued standard.



Section 22. Authority. This Agreement has been executed and delivered by persons who are duly authorized to execute and deliver the same for and on behalf of Developer, and all actions required under Developer's organizational documents and applicable governing law for the authorization, execution, delivery, and performance of this Agreement have been duly taken.

Section 23. Non-Liability of Governments, Employees and Agents. No member, official, employee or agent of the City or Marin Housing Authority shall be personally liable to Developer, or Developer's successors in interest, in the event of any default or breach by the City or Marin Housing Authority, or for any amount of money which may become due to Developer or its successors or for any other obligation of City or Marin Housing Authority under this Agreement.

Section 24. Survival; No Merger. All of the terms, provisions, representations, warranties and covenants of the Parties under this Agreement shall survive the close of escrow of any sale of the Affordable Unit Property and shall not be merged in any deed transferring the Affordable Unit Property.

Section 25. Further Assurances. The Parties shall execute, acknowledge and deliver to the other such other documents and instruments, and take such other actions, as either shall reasonably request as may be necessary to carry out the intent of this Agreement.

Section 26. Action by City and Marin Housing Authority.

(a) Except as may be otherwise specifically provided herein, whenever any notice, direction, consent or request by the City is required or permitted under this Agreement, such action shall be in writing, and such action may be given, made or taken by the City Manager or by any person designated by the City Manager, without further approval by the City Council.

(b) Except as may be otherwise specifically provided herein, whenever any notice, direction, consent or request by the Marin Housing Authority is required or permitted under this Agreement, such action shall be in writing, and such action may be given, made or taken by the Executive Director or by any person designated by the Executive Director, without further approval by the Board of the Marin Housing Authority.

Section 27. Waivers. Any waiver by Marin Housing Authority or the City of any obligation or condition in this Agreement must be in writing. No waiver shall be implied from any delay or failure by Marin Housing Authority or the City to take action on any breach or default of Developer or to pursue any remedy allowed under this Agreement or applicable law. Any extension of time granted to Developer to perform any obligation under this Agreement shall not operate as a waiver or release from any of its obligations under this Agreement. Consent by Marin Housing Authority or the City to any act or omission by Developer shall not be construed to be a consent to any other or subsequent act or omission or to waive the requirement for Marin Housing Authority's or the City's written consent to future waivers.

Section 28. Title of Parts and Sections. Any titles of the sections or subsections of this Agreement are inserted for convenience of reference only and shall be disregarded in interpreting any part of the Agreement's provisions.

Section 29. Multiple Originals; Counterpart. This Agreement may be executed in multiple originals, each of which is deemed to be an original, and may be signed in counterparts.

Section 30. Severability. In the event any limitation, condition, restriction, covenant, or provision contained in this Agreement is to be held invalid, void or unenforceable by any court of competent jurisdiction, or if any provision of this Agreement is rendered invalid or unenforceable pursuant to any California statute which became effective after the effective date of this Agreement, the remaining portions of this Agreement shall nevertheless remain in full force and effect.

Section 31. Exhibits. The following exhibits are attached to this Agreement:

- Exhibit A      Legal Description of the Property
- Exhibit B      Site Plan and Location of Affordable Unit
- Exhibit C      Affordable Sale Price Calculation
- Exhibit D      Notice of Release of Below Market Rate Housing Agreement

*Signatures On Following Page*

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed as of the day and year first above written.

**DEVELOPER:**

**21 G Street, LLC**, a California limited liability company

By: \_\_\_\_\_  
Arvand Sabetian, Authorized Signatory

**CITY:**

**City of San Rafael**, a municipal corporation

By: \_\_\_\_\_  
City Manager

**MARIN HOUSING AUTHORITY:**

Housing Authority of the County of Marin, a public body, corporate and politic, created under the Housing Authority Law of the State of California

By: \_\_\_\_\_  
Lewis A. Jordan, Executive Director

**APPROVED AS TO FORM:**

By: \_\_\_\_\_  
City Attorney

**SIGNATURES MUST BE NOTARIZED**

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA )  
 )  
COUNTY OF \_\_\_\_\_ )

On , before me, , Notary Public, personally appeared , who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify UNDER PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

\_\_\_\_\_  
Name: \_\_\_\_\_  
Notary Public

(seal)





## **EXHIBIT A**

The land referred to is situated in the County of Marin, City of San Rafael, State of California, and is described as follows:

### **PARCEL ONE:**

Beginning at a point on the Easterly line of Ida Street distant 56 feet Southerly from the Southerly line of Fourth Street; thence Easterly at right angles to said Ida Street 64-5/10 feet; thence at right angles Southerly 56 feet; thence at right angles Westerly 64-5/10 feet to the said Easterly line of Ada Street; thence Northerly along said line 56 feet to the point of beginning.

Being the most Westerly one half of Lot 2 in Block 4 as per Map of the Townsite of the Town of San Rafael, filed in the Office of the County Recorder of Marin County on October 14, 1873 and being the same Parcel of land described in and conveyed by that certain Deed from Mary McElnay as first party, Antonio Arbini as second party, dated April 8, 1895 and recorded in Book 35 of Deeds, at Page 66, Marin County Records.

### **PARCEL TWO:**

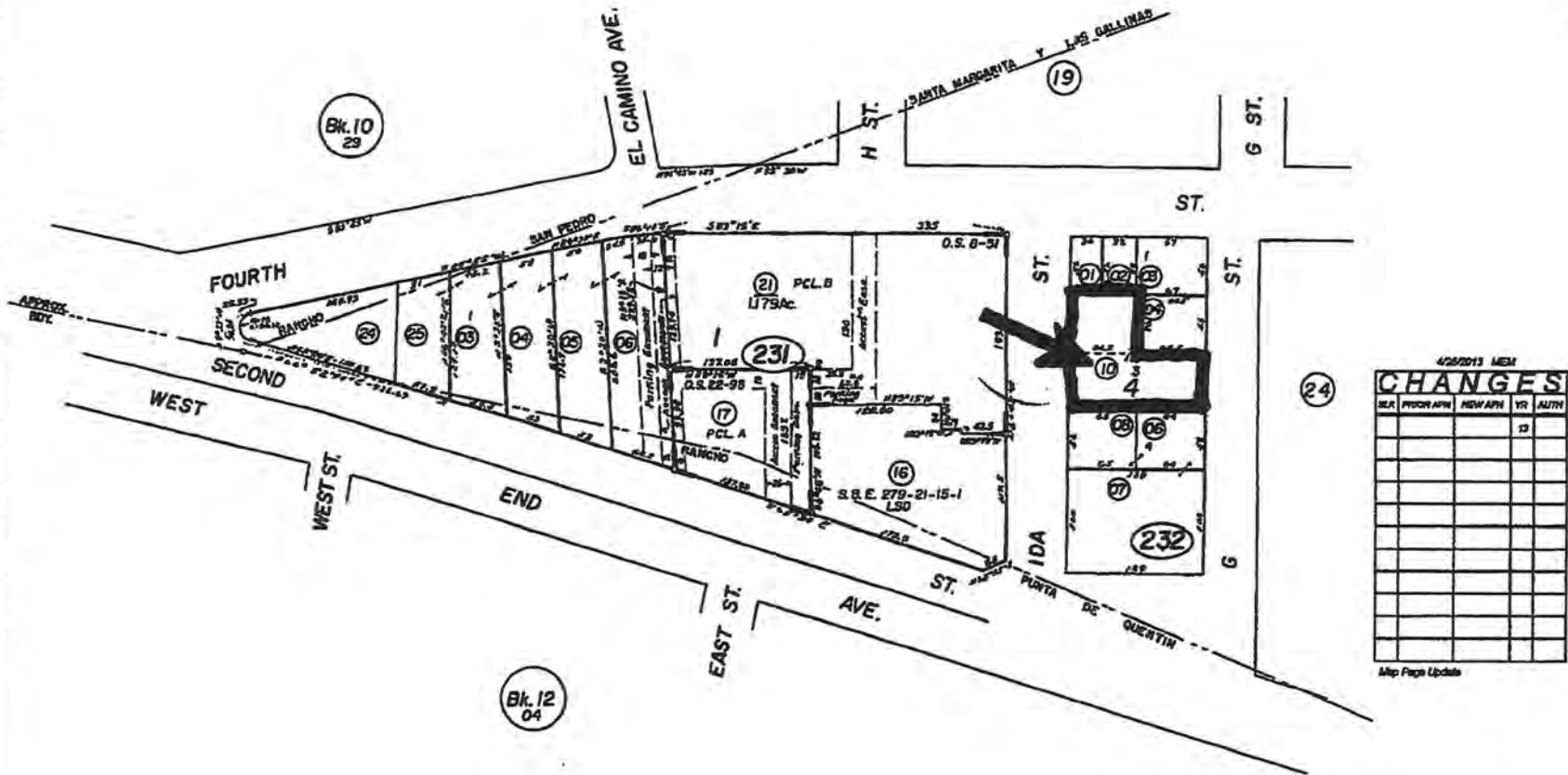
Lot 3 in Block 4 as per Map of the Townsite of the Town of San Rafael, filed in the Office of the County Recorder of Marin County on October 14, 1873, and more particularly described as follows:

Beginning at a point on the Easterly line of Ida Street which point is distant 112 feet, Southerly from the South line of Fourth Street, running thence from said point of beginning Southerly along the East line of Ida Street, 56 feet to a stake, Thence Easterly parallel with Fourth Street 132 feet to a fence, thence Northerly along the fence 56 feet to a stake, thence Westerly parallel with Fourth Street 132 feet to the place of beginning.

APN: 011-232-10



Description: Marin, CA Assessor Map - Book Page 11.23 Page: 1 of 1. <http://www.empireassessors.com> and [www.assessor.net](http://www.assessor.net) Order: see Comment:



Townsite of San Rafael, Rack | Pull 4

NOTE - Assessor's Block Numbers Shown in Ellipses.  
Assessor's Parcel Numbers Shown in Circles.

CITY OF SAN RAFAEL  
Assessor's Map Bk. 11 -Pg. 23  
County of Marin, Calif.



LOT & BUILDING DATA

EXHIBIT B

DRAWING NUMBER

DRAWING INDEX

PROJECT ADDRESS: 21 'G' STREET, SAN RAFAEL, CA

ASSESSORS PARCEL NUMBER: APN# 011-232-10

ZONING DESIGNATION: HRI (HIGH DENSITY RESIDENTIAL DISTRICT)

TYPE OF CONSTRUCTION: V A

BUILDING OCCUPANCY: RESIDENTIAL (GROUP R3)

PROJECT DESCRIPTION: 8-UNIT RESIDENTIAL TOWNHOUSE DEVELOPMENT

NUMBER OF UNITS: 8

NUMBER OF ACCESSORY BUILDINGS: NONE

AUTOMATIC SPRINKLER SYSTEM: YES (DEFERRED SUBMITTAL)

PARKING SPACES REQUIRED: STATE DENSITY BONUS PARKING STANDARDS  
2 BEDROOM UNITS ON IDA ST. = 2 PER UNIT  
2 X 6 UNITS = TOTAL 12 REQUIRED  
3 BEDROOM UNITS ON 'G' ST. = 2 PER UNIT  
2 X 2 UNITS = TOTAL 4  
0 GUEST SPACES REQUIRED  
TOTAL: 16 SPACES REQUIRED

PARKING SPACES PROVIDED: 2 PER UNIT PROVIDED X 8 UNITS =16 PROVIDED  
GUEST SPACES PROVIDED = 0 PROVIDED  
TOTAL: 16 SPACES PROVIDED

AFFORDABLE HOUSING: 2-10 UNITS 10% (1) REQUIRED  
8 UNIT PROJECT (1) PROVIDED

TOTAL LOT AREA: .2488 ACRES (10,836 SF)+/-

INDIVIDUAL LOT SIZES: LOT 1 2,064 SF, LOT 2 967 SF, LOT 3 967 SF,  
LOT 4 967 SF, LOT 5 967 SF, LOT 6 1,290 SF,  
LOT 7 1,806 SF, LOT 8 1,806 SF

TOTAL LOT COVERAGE: 5,653 SF (52% LOT COVERAGE) (60% ALLOWED)

TOTAL BUILDING AREAS (NOT INCLUDING GARAGES): 10,538 SF

COMMON RECREATIONAL AREA: 732 SF

BUILDING FOOTPRINT ON IDA STREET: 3,623.42 SF

BUILDING FOOTPRINT ON 'G' STREET: 1,741.36 SF

LOT COVERAGE ALLOWED: 60%  
TOTAL LOT COVERAGE 'G' STREET & IDA STREET = 5,653SF  
5,653SF - 10,836SF TOTAL LOT AREA =.52 OR 52%

15' FRONT YARD SET BACK ON 'G' STREET=840SF  
50% LANDSCAPING = 420SF REQUIRED  
312 SF LANDSCAPING PROVIDED (20' FRONT YARD)  
15' FRONT YARD SET BACK ON IDA STREET=1,680SF  
50% LANDSCAPING = 840SF REQUIRED  
872 SF LANDSCAPING PROVIDED (20' FRONT YARD)

NUMBER OF STORIES ON 'G' STREET: 3  
NUMBER OF STORIES ON IDA STREET: 3

BUILDING HEIGHT ON 'G' STREET: 31'-10" (36' ALLOWED)  
AVERAGE BUILDING HEIGHT ON IDA STREET: 33'-4" (36' ALLOWED)

NOTE: TENTATIVE MAP APPLICATION AND FEES SHALL BE SUBMITTED AFTER THE DESIGN REVIEW BOARD HEARING. SUBDIVISION EXCEPTION REQUEST PER SRMC SECTION 15.12.060(a) SHALL BE SUBMITTED AT TIME OF TENTATIVE MAP APPLICATION.

ARCHITECTURAL	TENTATIVE MAP	DR-1	SITE PLAN & TITLE SHEET
		C-1	EXISTING SITE MAP
		C-2	TENTATIVE MAP
		CT	CONTEXT PLAN & ELEVATIONS
		DR-2	EXISTING SITE PLAN AND ELEVATIONS
		DR-3	GRADING & DRAINAGE PLAN
		DR-3.1	UTILITY PLAN
		DR-4	PROPOSED GARAGE & FIRST FLOOR PLAN FOR 'G' STREET
		DR-5	PROPOSED 2ND FLOOR & ROOF PLAN FOR 'G' STREET
		DR-6	PROPOSED GARAGE PLANS FOR IDA STREET
		DR-7	PROPOSED FIRST FLOOR PLANS FOR IDA STREET
		DR-8	PROPOSED SECOND FLOOR PLANS FOR IDA STREET
LANDSCAPE		DR-9	PROPOSED ROOF PLAN FOR IDA STREET
		DR-10	PROPOSED 'G' STREET ELEVATIONS
		DR-11	PROPOSED ELEVATIONS FOR IDA STREET
		DR-12	ELEVATIONS FOR IDA STREET & BUILDING SECTIONS
PARKING		L-1	LANDSCAPE PLAN
		P-1	PARKING PLAN IDA STREET
		P-2	PARKING PLAN 'G' STREET

PROJECT TEAM

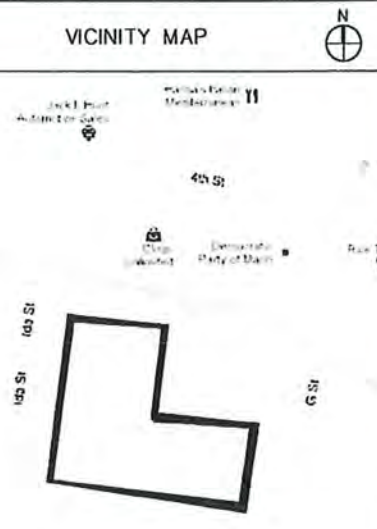
OWNER: DAVID & CHRISTINA RASONSKY  
54 SEQUOIA RD.  
FAIRFAX, CA 94930  
(415) 456-8872

DESIGN & DEVELOPMENT: CAMICCIA CONSTRUCTION  
P.O. BOX 2668  
SAN ANSELMO, CA 94979  
(415) 479-0599  
(415) 479-0699 FAX

LANDSCAPE DESIGN: PEDERSEN ASSOCIATES LANDSCAPE ARCHITECTURE  
24 H STREET  
SAN RAFAEL, CA. 94901  
(415) 456-2070

CONSULTANT ENGINEER: STAN RUPPIER  
926 WOODSIDE CT.  
TAHOMA, CA 96142  
(530) 525-4560

VICINITY MAP



CODE COMPLIANCE

ALL CONSTRUCTION SHALL CONFORM WITH LOCAL JURISDICTION ORDINANCES, (BUILDING AND FIRE CODE ADOPTIONS):

CALIFORNIA BUILDING CODE (CBC): VOLUMES 1&2 2010 EDITION

CALIFORNIA MECHANICAL CODE (CMC): 2010 EDITION

CALIFORNIA ELECTRICAL CODE (CEC): 2010 EDITION

CALIFORNIA PLUMBING CODE (CPC): 2010 EDITION

CALIFORNIA FIRE CODE (CFC): 2010 EDITION

CALIFORNIA ENERGY STANDARD (CES): 2010 EDITION

CALIFORNIA HISTORICAL BUILDING CODE(CHBC): 2010 EDITION

Date	Rev	Issue / Revision
02-05-13	1	DESIGN REVIEW SUBMITTAL
07-30-13	2	DESIGN REVIEW SUBMITTAL
01-08-14	3	DESIGN REVIEW SUBMITTAL
05-24-14	4	APPELLANT REDERSON
09-27-16	5	TIME EXTENSION REVISIONS

PROPOSED WEST END TOWNHOUSES  
21 'G' STREET  
SAN RAFAEL, CA  
A.P.N. #011-232-10

PROPOSED SITE PLAN & TITLE SHEET

Scale: AS NOTED  
Sheet Number:

DR-1

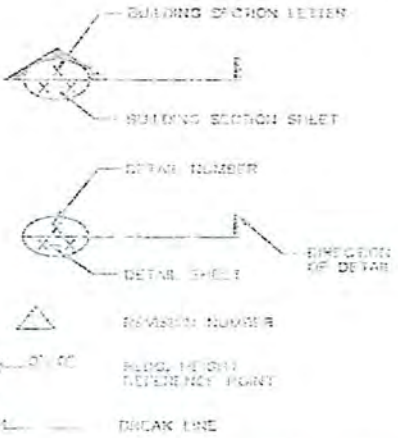
SEE TO BE ABOVE 21

129'-0"

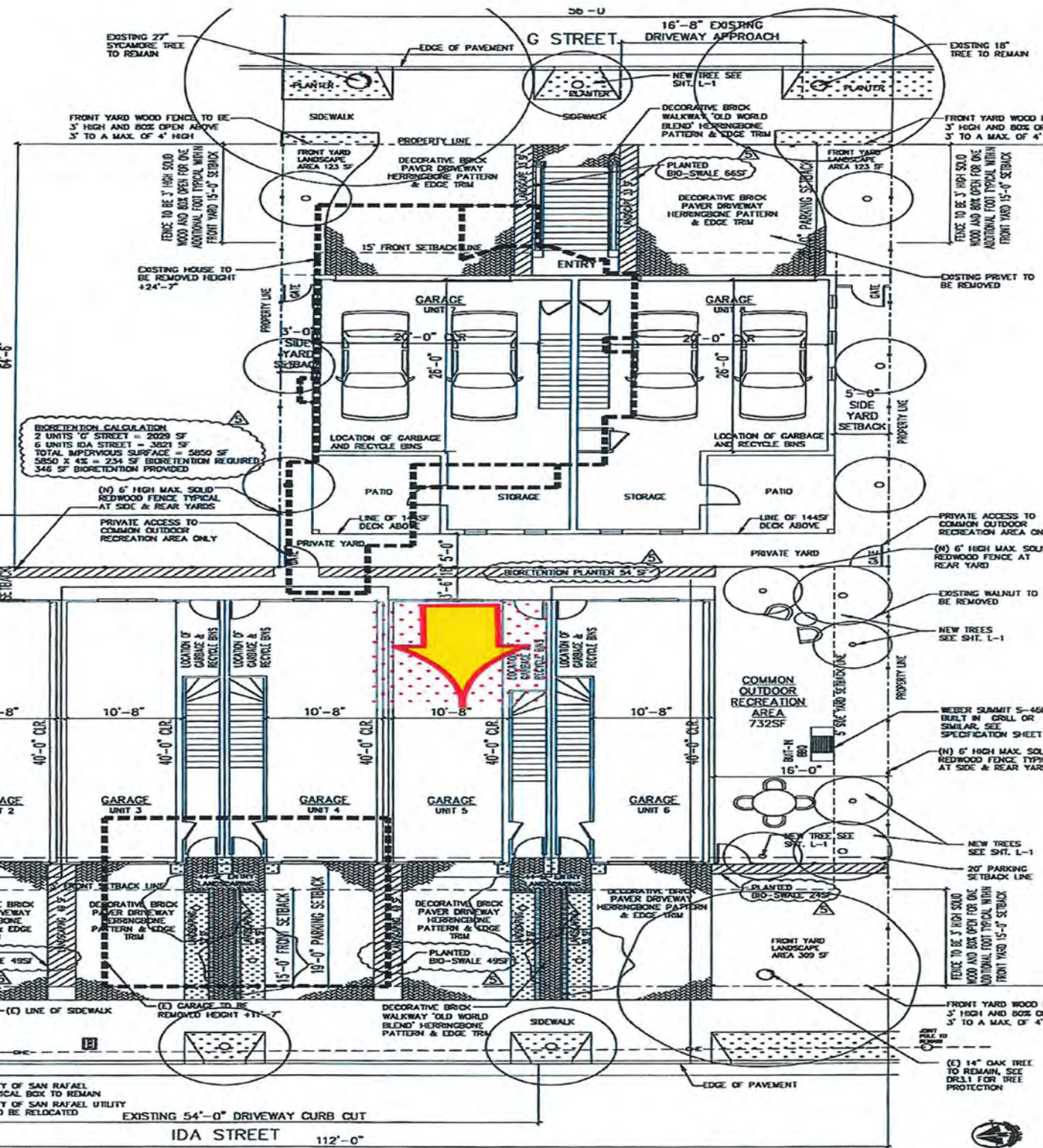
SEE TO BE ABOVE 21



SYMBOLS



UNITS EACH INDICATED SHALL HAVE AN  
 APPROXIMATE NUMBER OF UNITS THAT  
 IS TO BE DETERMINED BY THE OWNER  
 AND SHALL BE BASED ON THE TOTAL  
 SUPERFICIAL SURFACE TO BE  
 IMPROVED AT ALL LOCATIONS OF  
 IMPROVEMENTS. THE TOTAL SURFACE  
 TO BE IMPROVED SHALL BE DETERMINED  
 BY THE OWNER AND SHALL BE BASED ON  
 THE TOTAL SUPERFICIAL SURFACE TO BE  
 IMPROVED.



THE CITY OF SAN RAFAEL  
 ENGINEER  
 SCALE: 1/8"=1'-0"





EXHIBIT C

**Affordable Sales Prices 2018**

**Low Income Affordable Unit - 21 G Street, San Rafael, CA 94901**

Target Income:  of HUD median

Eligibility limit:  of HUD median

Number of bedrooms	<b>2BR</b>
Household size (for calculation purposes)	3 persons
Median income for household size (see chart below)	106,550
Median income reduced to affordability target shown above	63,930
Monthly income (annual income divided by 12)	5,330
33% Housing-expense-to income ratio	1,760

Breakdown of monthly housing expense

Property Tax (estimated @ 1.25% of sales price)	0	231	231	0
Homeowners Association Dues (estimated)		250		
Mortgage Insurance (estimated at .85 basis points)	0	149	149	0
Debt Service on home purchase financing (P & I)		<u>1,130</u>		
<b>Total Housing Expense</b>		<b>1,760</b>		

Financing -- assuming 30-year, fixed-rate mortgage

Rate (current prevailing rate / to be updated at completion)	5.00%
Term (months)	360

Loan amount 210,500

Loan-to-value ratio 95%

Purchase price  **221,600**

Downpayment @ 5% 11,100

Estimated closing costs (@ 4%) 8,900

Estimated cash required for downpayment plus closing costs **20,000**

<i>FY 2018 Marin County HUD Median Family Income effective 4/1/2018</i>		
<i>HH Size</i>	<i>Median</i>	<i>60%</i>
1 person	\$82,900	\$49,740
2 persons	\$94,700	\$56,820
3 persons	\$106,550	\$63,930
4 persons	\$118,400	\$71,040

**EXHIBIT D**

No Fee per GC 27383  
*Recording Requested by:*  
Housing Authority of the County of Marin  
*When Recorded Return to:*  
Housing Authority of the County of Marin  
Attention: BMR Department  
4020 Civic Center Drive  
San Rafael, CA 94903

---

(SPACE ABOVE THIS LINE FOR RECORDER'S USE)

**RELEASE OF BELOW MARKET RATE HOUSING AGREEMENT AND DECLARATION OF RESTRICTIVE COVENANTS**

This Release of Below Market Rate Housing Agreement and Declaration of Restrictive Covenants (the "Release") is made as of the \_\_\_ day of \_\_\_\_\_, 20\_\_\_, by the City of San Rafael, a municipal corporation (the "City"), the **HOUSING AUTHORITY OF THE COUNTY OF MARIN**, a public body, corporate and politic, created under the Housing Authority Law of the State of California ("Marin Housing Authority"), and \_\_\_\_\_ a \_\_\_\_\_ ("Developer").

1. This Release relates to that certain Below Market Rate Housing Agreement and Declaration of Restrictive Covenants by and between the City, the Developer, and Marin Housing Authority dated \_\_\_\_\_, \_\_\_\_, and recorded in the Official Records of the County of Marin (the "Official Records") on \_\_\_\_\_, \_\_\_\_ as Document No. \_\_\_\_\_ (the "Housing Agreement").
2. Developer has performed its obligations with respect to the real property described in Exhibit A, attached hereto and incorporated herein, as required by the Housing Agreement.
3. The City and Marin Housing Authority, as the entities entitled to enforce the Housing Agreement, and the Developer hereby release the real property described in Exhibit A from the encumbrance of the Housing Agreement.
4. This Release may be signed in multiple counterparts, which, when signed by all parties, shall constitute a binding agreement.

IN WITNESS WHEREOF, the City, the Developer, and Marin Housing Authority have executed this Release as of the day first above written.

**DEVELOPER:**

**21 G Street, LLC**, a California limited liability company

By: \_\_\_\_\_  
Arvand Sabetian, Authorized Signatory

**CITY:**

**City of San Rafael**, a municipal corporation

By: \_\_\_\_\_  
City Manager

**MARIN HOUSING AUTHORITY:**

Housing Authority of the County of Marin, a public body, corporate and politic, created under the Housing Authority Law of the State of California

By: \_\_\_\_\_  
Lewis A. Jordan, Executive Director

**APPROVED AS TO FORM:**

By: \_\_\_\_\_  
City Attorney

**SIGNATURES MUST BE NOTARIZED**











**SAN RAFAEL CITY COUNCIL AGENDA REPORT**

Department: Economic Development

Prepared by: Simon Vuong  
Economic Development Coordinator

City Manager Approval: \_\_\_\_\_

**TOPIC: Annual Renewal for the San Rafael Downtown Business Improvement District (BID) Business Assessment**

**SUBJECT: Resolution Declaring the City Council's Intention to Levy an Annual Assessment for the Downtown San Rafael Business Improvement District**

**RECOMMENDATION:**

Accept report and adopt resolution declaring the City Council's intention to levy an annual assessment for the Downtown San Rafael Business Improvement District.

**BACKGROUND:**

Section 36500 of the California Streets and Highways Code allows for the creation of a business improvement district (BID) within a municipality, whereby businesses within the district self-assess an annual fee in order to pay for improvements and activities which benefit the overall business district. The intent of the state law is to provide a funding mechanism for business districts to promote economic vitality.

Businesses in Downtown San Rafael set up a business district in 1979. This original district included approximately 125 businesses along Fourth Street between Lincoln Avenue and E Street. In 2013, the City Council voted to replace it with a larger district of approximately 700 businesses along Fourth Street. The expanded district includes the West End and some side streets, as well as non-ground floor tenants and other tenants not included in the original BID.

For 2018, the [BID Board of Directors](#) has focused on marketing and communication with their membership and the public via website updates, email blasts, and social media posts, hosting event information and various BID initiatives. The BID Board has also been actively collaborating with downtown stakeholders, including the Chamber of Commerce and the City, hosting member mixers, laying the ground work for beautification efforts, and leading several special events, including May Madness, Summer Sidewalk Sale, Trick-or-Treat, West End Village Celebration, Tivoli Lighting Project, and Small Business Saturday/Shop Local. Additional information relating to these efforts is included in the BID 2018 Annual Report (Attachment 2).

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**FOR CITY CLERK ONLY**

**File No.:**

**Council Meeting:**

**Disposition:**

## **ANALYSIS**

### **BID Renewal Process**

Per State law, to renew the annual assessment, the City Council must first adopt a Resolution of Intention to Levy an Annual Assessment and set a public hearing for a future date. In accordance with State law, the annual renewal process for the BID assessment will take place at two City Council meetings as follows:

#### *Meeting #1 – December 3, 2018*

Resolution of Intention to Levy an Annual Assessment: This meeting is intended to notify the public of the process. The only action required is to accept the BID annual report, which reviews past BID Board accomplishments and adopt the resolution of intention to levy an annual assessment. These actions do not commit the City Council to any ultimate decision other than initiating the annual renewal process.

#### *Meeting #2 – December 17, 2018*

Public Hearing on Annual Assessment: This is the meeting to receive additional input from the public on the annual assessment for the BID and to confirm the levy of an assessment for the upcoming year.

### **COMMUNITY OUTREACH:**

The BID will notify its members of the annual renewal process through its member communications, including the BID e-newsletter, notifications on the BID website, and through agenda items at the monthly BID Board meeting.

### **FISCAL IMPACT:**

Adoption of the resolution does not have a direct fiscal impact on the City other than ongoing staff time related to assessment billing and processing, as well as administration of the annual renewal. To the extent that the BID activities enhance the business climate within the district, this will generate increased sales tax revenue for the City.

### **OPTIONS:**

The City Council has the following options to consider on this matter:

- 1) Accept report and adopt the resolution as presented.
- 2) Accept report and adopt the resolution with modifications.
- 3) Decline to accept the report and decline to adopt the resolution.

### **RECOMMENDED ACTION:**

Accept report and adopt a resolution declaring City Council's intention to levy an annual assessment for the Downtown San Rafael Business Improvement District.

### **ATTACHMENTS:**

1. Resolution
2. Exhibit 1 to Resolution: BID 2018 Annual Report, including:
  - A. Exhibit A: BID Map
  - B. Exhibit B: BID 2018 Assessment Formula
  - C. Exhibit C: BID Budget
  - D. Exhibit D: Memo – BID Financial Summary

**RESOLUTION NO. XXXXX**

**RESOLUTION OF THE SAN RAFAEL CITY COUNCIL DECLARING THE CITY COUNCIL'S INTENTION TO LEVY AN ANNUAL ASSESSMENT FOR THE DOWNTOWN SAN RAFAEL BUSINESS IMPROVEMENT DISTRICT**

**WHEREAS**, California Streets and Highways Code Sections 36500 et seq. authorizes cities to establish parking and business improvement areas for the purpose of promoting economic revitalization and physical maintenance of business districts, in order to create jobs, attract new businesses and prevent erosion of business districts; and

**WHEREAS**, the Downtown San Rafael Business Improvement District ("BID") was established in 2013 to amend the existing Parking and Business Improvements District instituted in 1979 in the commercial area on and around the Fourth Street corridor in San Rafael; and

**WHEREAS**, pursuant to San Rafael Municipal Code Chapter 10.09 and California Streets and Highways Code Section 36533, the Advisory Board of the BID shall prepare an annual report for each calendar year in which assessments are to be levied which the City Council shall review; and

**WHEREAS**, the BID Advisory Board has prepared and submitted its "BID 2018 Annual Report" attached hereto as Exhibit 1 and incorporated herein by reference;

**NOW THEREFORE BE IT RESOLVED** by the City Council of the City of San Rafael as follows:

1. The City Council intends to levy an annual benefit assessment on businesses in the BID, except where funds are otherwise available, to pay for selected improvements and activities of the BID.
2. The boundaries of the entire area to be included in the BID, and the boundaries of each separate benefit zone within the BID, are set forth in the map and boundary description included as Exhibit A to the attached BID 2018 Annual Report. A map of the BID is also on file with the City Clerk.
3. The types of improvements and activities proposed to be funded by the levy of assessments on business in the BID are included as Exhibit C to the attached BID 2018 Annual Report.
4. The method and the basis for levying the benefit assessment on businesses within the BID are set forth in Exhibit B to the attached BID 2018 Annual Report.
5. All funds of the BID shall be expended on improvements and activities within the BID.
6. New businesses shall not be exempt from payment of the fee.

7. A public hearing to consider the levy of the BID assessment shall be held before the City Council on December 17, 2018 at 7 p.m. in the Council Chambers, 1400 Fifth Avenue, San Rafael, California. At the public hearing the testimony of all interested persons, for or against the levy of the BID assessment or of any of the matters included in the assessment, will be heard and all protests collected.

8. A protest against the assessment of the BID, or any aspect of the assessment may be made in writing or orally at the public hearing. To be counted as a part of a majority protest against the assessment of the BID, a protest must be in writing and from a business in the BID. A written protest may be withdrawn from the record at any time before the conclusion of the public hearing. Each written protest shall contain a written description of the business in which the person signing the protest is interested, sufficient to identify the business, and its address. If the person signing the protest is not shown on the official records of the City of San Rafael as the owner of the business, then the protest shall contain or be accompanied by written evidence that the person is the owner of the business. Any written protest of the regularity of the proceedings shall be in writing and clearly state the irregularity or defect to which objection is made.

9. If at the conclusion of the public hearing on December 17, 2018 there is a record of written protests by business owners within the BID who will pay fifty percent (50%) or more of the total assessments of the entire BID, no further proceedings to amend the BID shall occur. New proceedings to amend the BID shall not be undertaken again for a period of at least one year from the date of the finding of the majority written protest by the City Council. If the majority written protest is against a specific activity, inclusion of a specific area or type of business, or a specific assessment amount, adjustments may be made to the amendment proposal.

10. Further information regarding the Downtown San Rafael Business Improvement District may be obtained from the Office of Economic Development at 1125 B Street, San Rafael, CA 94901.

11. The City Clerk is directed to give notice of said public hearing by publishing the notice in a newspaper of general circulation in the City of San Rafael, at least seven days before the hearing; and by mailing a complete copy of this Resolution of Intention to those interested parties who have filed a written request with the local agency for mailed notice of public meetings or hearings on new or increased general taxes.

I, LINDSAY LARA, Clerk of the City of San Rafael, hereby certify that the foregoing Resolution was duly and regularly introduced and adopted at a regular meeting of the City Council of the City of San Rafael, held on Monday, the 3rd day of December 2018, by the following vote, to wit:

AYES:           COUNCILMEMBERS:  
NOES:           COUNCILMEMBERS:  
ABSENT:        COUNCILMEMBERS:

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Lindsay Lara, City Clerk



# BID 2018 Annual Report

## BID Board of Directors

2018 - 2019

**President - Jaime Ortiz**

Bank of Marin

**Vice President - Joanne Vosmek**

Copperfield's Books

**Secretary - Bonnie Ayers Namkung**

Marketing & Communications

**Treasurer - Jed Greene**

Five Corners Group

**Directors -**

**Jeff Brusati**, T & B Sports

**Adam Dawson**, Mike's Bikes

**Erika Bowker**, Pleasures of the Heart

**Dezzy St. Andre**, Rumor Has It

**Your Name Here!**



## President's Message

Dear Fellow BID Members,

The BID board is happy to share this overview of our 2018 efforts and accomplishments. Our cohesive, enthusiastic group of board members look forward to continuing to promote our downtown as a destination for shopping, entertainment and business.

We have big plans for next year and invite you to be a part of it, either by applying for an open board position or volunteering for a committee. Your energy and ideas can make a big difference in our downtown community!

*Jaime Ortiz, President*

*November 1, 2018*



## Mission

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The Business Improvement District promotes the common interests of downtown business owners. We help maintain and develop a downtown that is a welcoming place to shop, dine, work and live.

## Vision

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Downtown is the cultural heart and soul of our city, where activity, dining entertainment, and commerce come together with a creative and entrepreneurial spirit. Downtown is where hometown pride and community thrive.



## 2019 BID Work Plan

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### Marketing, Promotion and Events

Continue to build visibility and enthusiasm for downtown and BID member businesses through social media/online marketing, including:

- Collaboration and cross promotion with downtown arts organizations, especially through the newly formed Downtown San Rafael Arts District.
- Producing signature events
- Supporting events produced by BID members and outside producers through sponsorships, promotion and marketing
- Updates to Facebook, boosting event promotions and sharing member news
- Downtown branding through use of new logo and BID website updates
- Populate website with current information

### Planned Events for 2019

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Our goal for next year is to produce or assist with signature events and support other organizations' downtown events through marketing and financial backing, within our budget, including:

**May Madness, Summer Sidewalk Sale, Downtown Trick or Treat, West End Village Celebration, Small Business Saturday/Shop Local, & Litquake.**

We are also exploring the creation of a **Brew Crawl/Wine Tasting event** to showcase our new and established businesses.

## Economic Development, Beautification & Safety

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Our efforts will support the economic vitality of downtown by advocating on issues, ordinances and policies that affect downtown businesses and promote a clean, welcoming environment. Among our areas of focus:

- **Safety/hospitality** - Continue to advocate on issues of crime, code enforcement and nuisance behavior that negatively impact business in downtown.
- **Beautification/Experience on the street** - Meet with the City to address issues affecting patrons, business owners and employees. Ensure BID member interests are represented in any policy recommendations generated by the beautification study (in progress.) Lights, landscaping, sidewalk cleaning, etc.
- **Business retention/recruitment** - Support City's retail recruitment strategy through promotion of downtown and act as a resource for prospective tenants.
- **Streetscape** - Support the Downtown Streets Team and explore opportunities to expand their role, through expanded services such as enhanced sidewalk cleaning, graffiti removal and ambassador roles.
- **Promote activity/vibrancy** - Support implementation of the City's pilot lighting and outside dining programs.

## The BID Organization

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Our 2019 agenda also focuses on ensuring the BID's organizational foundation is strong, fiscally responsible and able to promote downtown to members and the community.

- **Legal compliance** - review bylaws, hold annual election and member meeting.
- **Communication with members** – increase engagement through a welcome kit for new businesses, routine communications through email newsletters, distribution of timely info by door-to-door visits by block captains, and quarterly mixers.
- **Increase board members and volunteers** - continue to recruit active committee members and engage prospective board members.
- **Raise BID funding** - identify supplemental funding sources through business sponsorship of events and more.

## 2018 Accomplishments

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- Website updated to streamline content for ease of access, events are highlighted, and information kept current and relevant for visitors.



- Collaborated with downtown stakeholders and community partners, with the San Rafael Chamber of Commerce, attended City meetings and events.
- Held Quarterly Member Mixers with safety and parking updates from SRPD and Parking Director and Director of Homeless Planning. Also Miriam Karell, Director of the Small Business Development Center (SBDC) gave presentation.
- Worked with the City to increase Beautification initiatives: West End pilot lighting project, sidewalk cleaning frequency, trash pickup (DTST), streetscape appeal, and safety.
- Attended the SR Downtown Arts District meetings to help establish identity and incorporate culture and art installations to elevate downtown. Ongoing efforts to incorporate district branding into downtown marketing, and to support and promote related events and businesses. Support art in empty windows initiative.
- Created BID Member Toolkit with contact info for Parking and Safety issues.
- Facebook updates and boosts have 3,000+ followers.
- Marketing for members through print and online media sources, including the website, Facebook page, the Marin IJ, Pacific Sun and Marinscope newspapers.
- A targeted digital ad campaign of media impressions, Facebook boosts, and local merchants adding the poster to their websites and blasting it on their newsletters and to their email lists brought awareness of events to shoppers/participants.

### **2018 EVENTS:**

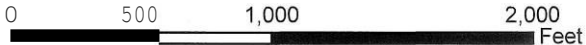
- The 30<sup>th</sup> annual **May Madness**, our legacy classic car parade event partnered with the Elks Club for an after party/dance featuring Pride and Joy. Thousands of visitors to our Downtown enjoyed the 200+ vintage and sports cars.
- The **Summer Sidewalk Sale** on 8-18-18 was greatly successful with 65+ participating businesses and hundreds of shoppers strolling our shops, discovering treasures and bargains and ringing the registers.
- October 27 marked the annual BID-produced **Trick of Treat on Fourth Street** event with the Latinx theme **Dia de los Muertos**. It included performances by the San Francisco Boys Chorus, Happy Feet Dancers “Thriller”, an information booth hosted by Foster Our Future, and a pet parade and costume contest by Woodland’s Pet Food & Treats.
- **West End Village Celebration** on Nov. 4, 11-7pm. Family fun and music all day. **Mayor Phillips will kick-off the new Tivoli pilot lighting at dusk!**
- **Small Business Saturday/Shop Local**, Nov. 24, event and ad campaign will highlight the many reasons to shop our Downtown.





# Downtown San Rafael Business Improvement District

## Exhibit A



## Exhibit B

### 2018 BID Assessment Formula

### 2018 Annual Assessment

Type of Business	Standard	Premium
Retail on the Ground Floor, Restaurant, Personal Services on the Ground Floor	\$175	\$225
Retail on the Ground Floor, Restaurant, Personal Services on Ground Floor with Less than \$100,000 in Gross Receipts	\$150	\$175
Offices, Professional, Personal Services, not on Ground Floor, Retail not on Ground Floor	\$75	\$100
Personal Services Sole Practitioner	\$25	\$50
Non-Profit Organization and Fine Artists	\$50	\$50
Financial Institution	\$375	\$425

# San Rafael Downtown BID Budget

# Exhibit C

	2017 Year End Fund Balance	\$66,006	2018 Year End Fund Balance	\$52,910
Revenues	2018 Programs	Year 2018 Estimated Year End	2018 Programs	Year 2019 Proposed Budget
	BID Assessments	\$79,212	BID Assessments	\$80,000
	Event Income - May Madness	\$31,332	Event Income	\$45,000
	Interest	\$3	Target Grant	\$10,000
<b>Total Operating Income</b>		<b>\$110,547</b>	<b>\$135,000</b>	
Expenses				
Events	May Madness	(\$7,219)	May Madness	(\$8,000)
	Trick or Treat	(\$1,756)	Trick or Treat	(\$600)
	Sidewalk Sales	(\$900)	Wine/Brewery Event	(\$10,000)
	West End Celebration	(\$5,000)	Shop Local Saturday	(\$1,000)
	Mixers	(\$250)	Restaurant Week	(\$1,000)
	Event Staffing	(\$27,000)	Second Fridays	(\$2,000)
			West End Celebration	(\$2,500)
			Sidewalk Sales	(\$2,500)
			Mixers	(\$500)
			LitQuake	(\$2,000)
			Event Staffing	(\$30,000)
<b>Events subtotal</b>		<b>(\$42,125)</b>	<b>(\$60,100)</b>	
Initiatives	Beautification	(\$10,000)	Beautification	(\$10,000)
			Art District	(\$2,500)
			Shop Local Campaign	(\$1,000)
			Target Grant Expense	(\$10,000)
<b>Initiatives subtotal</b>		<b>(\$10,000)</b>	<b>(\$23,500)</b>	
Marketing & Promotions	Event Advertising/Marketing	(\$18,000)	Event Advertising/Marketing	(\$22,000)
	Website Maintenance	(\$300)	Website Maintenance	(\$2,000)
	Social Media	(\$5,259)	BID Member Communication	(\$500)
			Social Media	(\$5,000)
<b>Marketing &amp; Promotions Subtotal</b>		<b>(\$23,559)</b>	<b>(\$29,500)</b>	
Operating Expenses	Staffing	(\$36,000)	Staffing	(\$17,000)
	meeting/travel exp	(\$468)	Insurance	(\$5,000)
	Insurance	(\$5,097)	tele/supplies/office	(\$2,200)
	tele/supplies/office	(\$2,086)	profess/accounting/banking	(\$1,500)
	profess/accounting/banking	(\$2,000)	meeting/travel exp	(\$1,000)
	office rent	(\$1,200)		
	other	(\$1,108)		
<b>Operating Expenses Subtotal</b>		<b>(\$47,959)</b>	<b>(\$26,700)</b>	
<b>Total Expenses</b>		<b>(\$123,643)</b>	<b>(\$139,800)</b>	
<b>Net Profit/(Loss)</b>		<b>(\$13,096)</b>	<b>(\$4,800)</b>	
<b>Projected 2018 Ending Fund Balance/Carryover to 2019</b>		<b>\$52,910</b>	<b>2019 Ending Fund Balance</b>	
			<b>\$48,110</b>	

\*Target grant revenues along with matching expenses are contingent upon being awarded a \$10,000 Target grant.

## ***Memorandum***

To: San Rafael City Council

From: Jed Greene, Treasurer  
San Rafael Business Improvement District

Date: November 1, 2018

Re: BID Financial Summary

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This memorandum highlights the significant 2018 financial activity of the San Rafael Business Improvement District (BID) and the 2019 proposed budget.

### 2018

For 2018, the BID is projected to have a net loss of approximately \$13,000, leaving a cash balance of \$52,910. 2017 was a period of transition, leaving the BID with excess cash. 2018 was much more active, where the BID used its excess cash for events and beautification projects.

Proceeds from BID assessments were down approximately 10% from years past, contributing to the net loss. We are currently working with the City to investigate the cause of the decline. We also incurred unplanned expenses related to the transition from the previous consultant to the new Executive Director, which increased our administrative costs and contributed to our net loss.

The 2018 May Madness event was one of the most successful events for the BID. Absent the allocation of the Executive Director fees, the event generated over \$10,000 in profit. Those funds were used to help create the street lights pilot project on the West End of downtown San Rafael.

### 2019

The BID projects to have a cash balance of approximately \$53,000 to begin 2019. With this cash balance, proceeds from the BID assessments and event revenues, the BID plans to have a busy year with more events and continued downtown beautification. As a result, the BID projects to have a net loss of \$4,800, leaving us with a cash balance of \$48,110 at the end of the year.

We have projected lower proceeds from BID assessments, similar to last year. Hopefully, last year was an anomaly and this year's assessments will be closer to historic levels. A vast majority of our expenses are related to an active events calendar.



**SAN RAFAEL CITY COUNCIL AGENDA REPORT**

Department: Economic Development

Prepared by: Simon Vuong  
Economic Development Coordinator

City Manager Approval: \_\_\_\_\_

A handwritten signature in blue ink, appearing to be 'AS', written over a horizontal line.

**TOPIC:** Proposal to Streamline On-Street Dining Process to Replace the Expired Parklet Program

**SUBJECT:** Informational Report Regarding Streamlining the Parklet Program to an On-Street Dining Application Process

**RECOMMENDATION:** Accept report.

**EXECUTIVE SUMMARY:**

The City of San Rafael authorized a Parklet Pilot Program from 2015 to 2018, during which one restaurant applied when four were authorized. That parklet project has not yet been constructed, but additional restaurants have since expressed interest in this expired program. To maintain business interest, staff recommends continuing the program but streamlining the process to encourage more participation and make it easier for potential applicants.

**BACKGROUND:**

All forms of outdoor dining are currently allowed under San Rafael Municipal Code Section 14.16.277, "[Use of City Sidewalks and Rights-of-Way for Outdoor Eating Areas](#)". This ordinance, in place since 2000, requires that the business enter into a license agreement with the City, provide liability insurance, provide a site plan for the proposed outdoor seating location, and agree to maintain the area. The zoning requirements and performance standards for outdoor dining are also outlined in San Rafael Municipal Code Section 14.17.110, "[Outdoor Eating Areas Proposed in Conjunction with Food Service Establishments](#)".

On August 17, 2015, the City Council adopted the [pilot program to expand the Outdoor Dining Program to include Parklet projects](#), which provided a process for businesses to use the parking space areas for outdoor dining purposes. Under the pilot program, no more than four on-street

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FOR CITY CLERK ONLY

File No.:

Council Meeting:

Disposition:

dining projects spread throughout Downtown, taking up no more than eight cumulative parking stalls would have been allowed, with no single on-street dining project occupying more than two parking stalls. The maximum number of on-street dining projects allowed in the three identified sub-districts was also capped at two to evenly distribute these projects. The pilot program was authorized for a total of three years, and effectively expired on August 17, 2018, but additional restaurants have since expressed interest in the program.

**ANALYSIS:**

Despite the expiration of the pilot program, staff has concluded that allowing on-street dining will add to the vitality of Downtown San Rafael. Therefore, staff is recommending that the City continue to allow on-street dining under the same limitations authorized in the August 17, 2015.

Waiver of Certain Code Requirements - Staff recommends a waiver of the following limitations on outdoor dining establishments contained in San Rafael Municipal Code section 14.17.110(C)(3), 'Intensification of Use,' which limits the total amount of allowed outdoor seating, and San Rafael Municipal Code 14.17.110(C)(7), 'Fixtures', which requires that furnishings be moveable. Staff believes that waiving these provisions will create more interest in on-street dining among business owners.

**COMMUNITY OUTREACH:**

In addition to the community outreach performed in 2015, staff has presented and solicited feedback from a variety of community groups, including the Downtown Business Improvement District (BID), the Chamber of Commerce Economic Vitality Committee, and the City Council's Economic Development Subcommittee.

**FISCAL IMPACT:**

As with the original program, the main fiscal impact would be the loss of parking meter revenue at the at the specific improved locations. The loss per parking meter has been estimated to be \$2,000 to \$4,000 per stall per year, for a total of \$4,000 to \$8,000 per project, for a maximum amount of \$16,000-\$32,000 if all four on-street dining projects are approved and in operation. Any increase in meter revenues at other locations due to the increased activity has not been factored into the above estimates.

The fee waiver of \$932 per project for the first four restaurants would remain for businesses to incentivize participation. A Building Permit would still be required to install the on-street dining project, and the cost of the Building Permit is not included as part of the waived fees.

**OPTIONS:**

The City Council has the following options to consider on this matter:

1. Accept the report as presented or with modifications.
2. Take no action.

**RECOMMENDATION:**

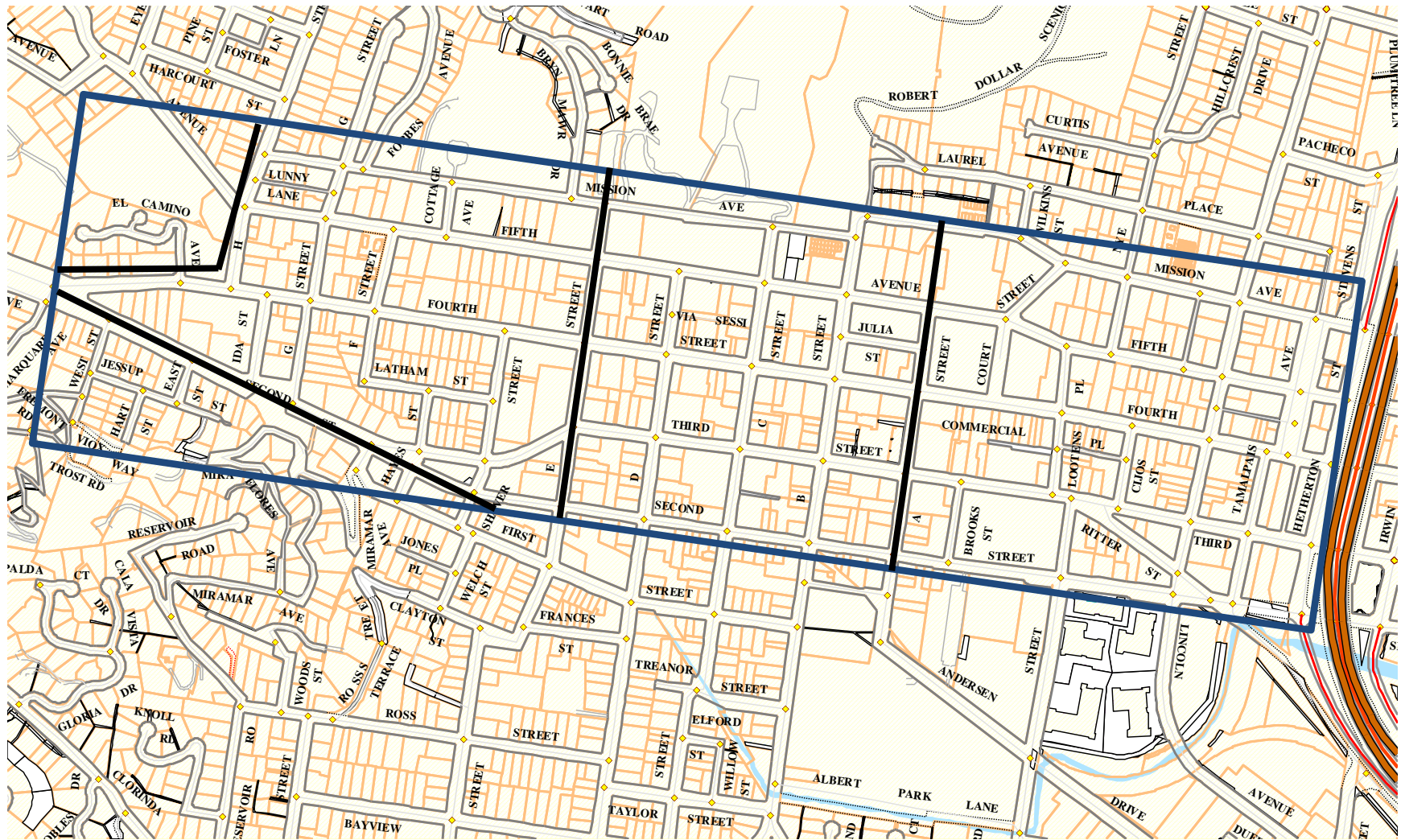
Accept the report to extend the program and streamline the process.

**ATTACHMENT:**

1. Map of Outdoor Dining Pilot Program Areas



# ATTACHMENT 1







**SAN RAFAEL CITY COUNCIL AGENDA REPORT**

Department: Fire Department

Prepared by: Christopher Gray,  
Fire Chief

City Manager Approval: \_\_\_\_\_

**TOPIC: CAL FIRE – FIRE PREVENTION GRANT APPLICATION APPROVAL**

**SUBJECT: RESOLUTION APPROVING THE FILING OF AN APPLICATION FOR THE CALIFORNIA CLIMATE INVESTMENT FIRE PREVENTION GRANT PROGRAM**

**RECOMMENDATION:**

Adopt a resolution approving the filing of an application for the California Climate Investment Fire Prevention Grant Program.

**EXECUTIVE SUMMARY:**

Through the [California Climate Investments Fire Prevention Grant Program](#), the California Department of Forestry and Fire Prevention (CAL FIRE) allocated up to \$155 million to support communities in their efforts to reduce the risk of wildland fires to habitable structures and communities, while maximizing carbon sequestration in healthy wildland habitat and minimizing the uncontrolled release of emissions emitted by wildfires. This grant funding opportunity provides funding for local projects and activities that address the risk of wildfire and reduce wildfire potential to forested and forest adjacent communities near State Responsibility Areas (SRA). Specifically, activities funded by this grant include the following: hazardous fuel reduction, fire planning, and fire prevention education with an emphasis on improving public health and safety while reducing greenhouse gas emissions.

As part of the application process, a resolution approving the filing of an application for the grant program is required. If the City is selected to receive an award, staff will utilize those funds to help improve the City's Vegetation Management and Fire Prevention programs. The grant application will request an additional \$400,000 to \$600,000 to supplement the current Vegetation Management and Fire Prevention budget. Matching funds from the City are not required, and a 12 percent allowance is provided for administrative services relating to the grant.

**BACKGROUND:**

As part of their Fiscal Year 2018-19 Budget, the State of California allocated up to \$155 million to Forest Health and Fire Prevention Programs, administered by the State Department of Forestry and Fire

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**FOR CITY CLERK ONLY**

File No.: \_\_\_\_\_

Council Meeting: \_\_\_\_\_

Disposition: \_\_\_\_\_

Protection (CAL FIRE). CAL FIRE's California Climate Investment Fire Prevention Grant Program provides funding for local projects reducing wildfire potential and spread, including hazardous fuel reduction, fire prevention education, and fire prevention planning. The Fire Prevention Grant presents an opportunity to expand the City of San Rafael's current vegetation management efforts towards larger vegetation management and fire prevention project areas impacting the resilience and safety of the community and State Responsibility Areas (SRA).

While ongoing efforts have helped reduce San Rafael's wildfire risk, additional funding is needed to meet the large demand for fuel reduction projects to address ever-growing fuel load and interface between the public and natural areas. New project sites and maintenance in previously cleared areas is needed to effectively reduce wildfire risk. For example, in 2014, the Fire Department worked with Marin County Fire and Caltrans to clear a portion of Puerto Suello Hill. The first phase, a two-acre portion of the land, was cleared of large Eucalyptus trees and additional dead debris. In the past four years, young Eucalyptus saplings have regrown in large numbers, along with another invasive species called French Broom. Housing a number of hazards, this area is overdue for fuel reduction.

In November 2018, the Fire Department received a cost estimate for a 150-day removal plan aimed to get the dead and dying fuel removed from the Puerto Suello hillside, thus removing all the rapidly combustible ladder fuels. An initial phase of the project would be required to manage the fire threat early in the 2019 fire season. The completion of the project will help eliminate an area of potentially rapid fire spread.

In addition to the above project, the Department has outlined other prescriptions for fuel reduction. In 2018, the surface of five miles of fire roads were improved, and fuel removed along the roadway, allowing for emergency vehicles to pass more easily. The fire roads along this five-mile path make up the boundaries with China Camp. Subsequent fuel removal is needed along additional fire roads to create continuous fuel break and assure safe response access to potential high fire risk areas. The grant can also be used to purchase equipment, such as a wood chipper, to reduce the City's reoccurring costs relating to community chipper days. Additional fuel reduction is needed within City owned open space lands when in proximity to homes and critical infrastructure.

**ANALYSIS:**

By adopting the attached resolution, the City Council would affirm their support of the grant application to CAL FIRE, which will allow for the Fire Department to submit a grant application to support additional fuel reduction and fire prevention efforts in San Rafael. The resolution is a requirement for the grant application, which must be submitted on or before the December 19, 2018 deadline. Notice of project selection will occur in April 2019, with grant agreements completed before August 20, 2019. Work can be started immediately upon the grant agreement finalization. Work covered by the grant must be completed by March 15, 2022. The grant will support improved vegetation management, hazardous fuel reduction, and improved fire prevention without additional costs to the City. Grant funds will help complete fuel reduction in areas not previously treated, as well as provide maintenance in areas previously benefitting from fuel reduction efforts.

**COMMUNITY OUTREACH:**

As the grant application process moves forward, City staff will connect with stakeholders accordingly, including notification in the event of a grant award as well as limitations – geographic and otherwise – of allowable projects utilizing grant funding. If the City were to receive the grant, communications with the neighboring Homeowners Associations and Caltrans will be required if any proposed work will continue onto privately owned land. In addition, notification may be required if the U.S. Highway 101 northbound

onramp at Villa Avenue will be needed for lower access or work to remove debris. Fuel reduction project status will be shared with the community to illustrate the ongoing efforts to reduce wildfire risk.

**FISCAL IMPACT:**

There is no fiscal impact associated with this item; formal adoption of the resolution simply approves the grant application submission. The grant will be completed by staff and utilizing information already compiled as part of a strategic review of vegetation management projects. Additional staff time will be required if the grant application is approved for the management of projects, contracts, and grant requirements. The Fire Department is finalizing a list of eligible project costs to include in the grant. The grant request will be for \$400,000 to \$600,000.

Existing appropriated monies dedicated to Vegetation Management will support high priority work to be completed prior to the start of the grant performance period. These funds will be reported in the grant application to show local investment and represent “matching funds”. While not required, matching funds are positively viewed and increase the likelihood of the grant approval. Grant funds cannot and will not supplant current funding sources and budgeted projects. Once the grant application is approved, and a grant agreement is completed, the City will become eligible to begin the fuel reduction projects as described in the grant application.

Payment of grant funds will generally be through reimbursement from the State upon approval of invoices San Rafael submits. City funds outside the existing budget may be temporarily expended to pay for completed work prior to receiving grant reimbursement from the State. Advanced payments of up to 25 percent of the total grant award may be requested and approved at the discretion of CAL FIRE.

**OPTIONS:**

The City Council has the following options to consider on this matter:

1. Adopt the resolution approving filing a California Climate Investment Fire Prevention Grant Program application.
2. Adopt the resolution with modifications and/or future requests.
3. Direct staff to return with more information.
4. Take no action.

**RECOMMENDED ACTION:**

Adopt a resolution approving the filing of an application for the California Climate Investment Fire Prevention Grant Program.

**ATTACHMENT:**

1. Resolution

RESOLUTION NO XXXXX

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SAN RAFAEL, STATE OF CALIFORNIA APPROVING THE FILING OF AN APPLICATION FOR CALIFORNIA CLIMATE INVESTMENT FIRE PREVENTION GRANT PROGRAM**

---

**WHEREAS**, the Governor of the State of California in cooperation with the California State Legislature has enacted State of California Climate Investment, which provides funds to the State of California and its political subdivisions for fire prevention programs; and

**WHEREAS**, the State Department of Forestry and Fire Protection (CAL FIRE) has been delegated the responsibility for the administration of the program within the State, setting up necessary procedures governing application by local agencies, non-profit organizations, and others under the program; and

**WHEREAS**, the applicant will enter into an agreement with the State of California to carry out the San Rafael Open Space Fire Prevention project;

**NOW, THEREFORE, BE IT RESOLVED**, that the City Council of the City of San Rafael:

1. Approves the filing by the City of San Rafael of an application for “California Climate Investment Fire Prevention Grant Program”; and
2. Certifies that said applicant has or will have sufficient funds to operate and maintain the project; and
3. Certifies that funds under the jurisdiction of the City of San Rafael are available to begin the project; and
4. Certifies that said applicant will expend grant funds prior to March 15, 2022; and
5. Appoints the Fire Chief, or a designee, to conduct all negotiations, execute and submit all documents including, but not limited to applications, agreements, amendments, payment requests and so on, which may be necessary for the completion of the aforementioned project.

I, Lindsay Lara, Clerk of the City of San Rafael, hereby certify that the foregoing Resolution was duly and regularly introduced and adopted at a regular meeting of the San Rafael City Council held on Monday the 3<sup>rd</sup> day of December 2018 by the following vote:

AYES: Councilmembers:

NOES: Councilmembers:

ABSENT: Councilmembers:

---

LINDSAY LARA, City Clerk



**SAN RAFAEL CITY COUNCIL AGENDA REPORT**

Prepared by: Bill Guerin,  
Public Works Director

City Manager Approval: \_\_\_\_\_

**TOPIC: SECOND AND THIRD STREET SMART-RELATED SIGNAL IMPROVEMENTS**

**SUBJECT: A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SAN RAFAEL AUTHORIZING THE CITY MANAGER TO EXECUTE A SECOND AMENDMENT TO THE MEMORANDUM OF UNDERSTANDING WITH THE SONOMA-MARIN AREA RAIL TRANSIT DISTRICT TO INCLUDE CONSTRUCTION OF TRAFFIC SIGNAL IMPROVEMENTS IN THE AMOUNT OF \$324,876, AND AUTHORIZING CONTINGENCY FUNDS IN THE AMOUNT OF \$55,124, FOR A TOTAL APPROPRIATED AMOUNT OF \$380,000.**

**RECOMMENDATION:** Adopt a resolution authorizing the City Manager to execute an amendment to the Memorandum of Understanding with Sonoma-Marin Area Rail Transit (SMART) to authorize SMART to include traffic signal improvements in its construction at Second and Third Street Rail Crossings.

**BACKGROUND:** Sonoma-Marin Area Rail Transit (SMART) is constructing its Larkspur Extension project, which will extend rail service from downtown San Rafael to Larkspur Landing. SMART competitively awarded a design/build contract to the joint venture Stacy and Witbeck/Herzog (SWH). In February 2018, SWH began work associated with reconstructing the Andersen Drive railroad crossing. Following the Andersen Drive work, SWH shifted construction activities to the Francisco Blvd West “flip” in July 2018. The construction phase of the Larkspur Extension will be complete in 2019 once work within the Transit Center is performed and all rail warning systems tested.

In March 2017, the City executed a [Memorandum of Understanding \(MOU\)](#) between the City and SMART to include construction activities at the Andersen Drive Crossing. In May 2018 an amendment to the MOU was executed between SMART and the City which authorized SMART to install a City-funded Multi-Use Pathway from Andersen Drive to Rice Drive. SMART is currently progressing with their work and anticipates performing work within the Bettini Transit Center in the next few months. In order to improve safety characteristics around the new rail crossings at Second and Third Streets, additional signal equipment is needed to prevent vehicles from stopping on the rail tracks.

In October 2018, the City, anticipating the need to install traffic signal equipment at the railroad crossings on Second and Third Streets, requested that SMART provide the City with a proposal to construct said improvements. The proposed traffic signal work will be integrated into SMART’s Larkspur

**FOR CITY CLERK ONLY**

File No.: \_\_\_\_\_

Council Meeting: \_\_\_\_\_

Disposition: \_\_\_\_\_

Extension project through a contract change order if doing so will not interfere with the construction schedule of the Larkspur Extension project.

The City has completed the design of the traffic signal improvements adjacent to the new rail line and is in the process of obtaining a Caltrans encroachment permit for incidental work to occur within State of California right-of-way at the intersection of Second Street at Hetherton Street.

**ANALYSIS:** Staff is recommending that the City and SMART enter into a second amendment to the MOU to include the traffic signal improvements with SMART's construction of the Larkspur Extension.

Installation of additional safety measures at the railroad tracks, including railroad pre-emption as required by the California Public Utilities Commission (CPUC), and additional signal poles to stop vehicles before they enter the rail crossing area is critical to maximizing public safety at these rail crossings. On October 18, 2018, SMART forwarded SWH's proposal to the City in the amount of \$324,876 for this traffic signal work, which is less than the engineer's estimate of \$336,000.

Having SMART's contractor perform this work would minimize coordination conflicts, minimize the impacts to the public during construction and would be economically advantageous since mobilizing a second contractor in the same area would be a cost that can be avoided if SMART's contractor performs the work.

Waiver of Competitive Bidding

Public Works Contract Policy (Ch. 11.50 of the municipal code) requires competitive bidding for all purchases that exceed \$30,000. However Section 11.50.090 "Exception to bidding requirement—Waiver," in part, states the following:

*B. The city council, after reviewing and considering the facts of a particular public works project, may waive the bidding requirements of this chapter by finding that any one or more of the following circumstances exist:*

- 1. Limitations on the source or the scope and nature of the contract are such that no more than one contractor is available to meet the technical specifications and/or quality considerations of the project;*
- 2. The work is of a highly specialized nature;*
- 3. There would be no competitive advantage to requiring bidding for the contract;*
- 4. The cost of the work would be significantly increased or its completion significantly delayed;*
- 5. There exist other specific considerations justifying the waiver of the bidding requirements.*

Items 2, 4, and 5 apply to the construction of the SMART-related traffic signal improvements. The work, constructed adjacent to the rail line is of a highly specialized nature because of the need to ensure that the rail line and traffic signal improvements function together. SWH is uniquely suited to perform the work of the combined rail line and traffic signal improvements. If the project is competitively bid, the work will be delayed approximately three months while City staff solicit contractor bids and return to Council with a recommended award of contract. The cost will increase because SMART will need to complete the construction of their rail line before a second contractor can work in the same construction area. Furthermore, the City would be required to replace yet-to-be-constructed improvements around the Downtown SMART Station or Transit Center that will be impacted by the City's work. Soliciting bids from other contractors would require the traffic signal improvements to be constructed while active rail operations are occurring immediately adjacent to the signal work, which will significantly impact construction costs because of safety considerations. Additional cost would be incurred since there is a need to coordinate with SMART operations, and a need for additional shoring and other considerations to ensure the rail line is not impacted during installation of foundations for the



new signals. Finally, specific other considerations include the fact that SMART competitively procured its contract with SWH.

Staff and SMART have worked towards agreement on an amendment of the MOU to incorporate the traffic signal work and are close to finalizing the amendment. The draft "Amendment No. 2 to MOU" is attached. The MOU amendment provides that SMART will include the traffic signal work as a change order and that the City will support the cost of the project, obtaining any CPUC and environmental approvals necessary, issuing notices, and make quiet zone improvements.

Staff recommends that the City Council authorize staff to finalize, and the City Manager to execute, the Amendment No. 2 to MOU so that a notice to proceed can be issued as soon as possible. The procurement of new traffic signal poles has a long lead time for manufacturing and delivery. The new signal poles need to be in place and functioning as SMART tests their Larkspur Extension, which is anticipated to start in late Spring 2019.

**FISCAL IMPACT:** Approval of the second amendment to the MOU will authorize SMART to issue a change order to its contractor for construction of the Second and Third Streets SMART-related signal improvements project at the City's expense. This project is identified in the City's [Capital Improvement Program](#) (CIP) approved by Council in June 2018. Staff is requesting that a total construction budget for the project of \$380,000, which includes a contingency of \$55,124, be authorized from Traffic Mitigation Fund No. 246. City staff anticipates administering the construction management portion of the project in-house.

This project is identified and conforms to Policy C-6 of the City's General Plan 2020, which identifies Major Planned Circulation Improvement projects for the City of San Rafael as shown in Exhibit 21 of that document.

**OPTIONS:** The City Council has the following options to consider relating to this matter:

1. Adopt the resolution as presented.
2. Do not adopt the resolution. Electing this option will cause SMART to reject inclusion of the traffic signal work into their construction project. Public Works will solicit contractor bids and return to the City Council for action at a future meeting.
3. Provide direction to staff.

**RECOMMENDED ACTION:** Adopt a resolution authorizing the City Manager to execute a second amendment to the MOU with SMART to include the construction of City-funded signal improvements in the amount of \$324,876 and authorize a contingency of \$55,124 for a total appropriation of \$380,000.

**ATTACHMENTS:**

1. Resolution
2. Stacy and Witbeck/Herzog Proposal
3. Draft Amendment No. 2 to MOU between City of San Rafael and SMART

RESOLUTION NO. \_\_\_\_\_

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SAN RAFAEL AUTHORIZING THE CITY MANAGER TO EXECUTE A SECOND AMENDMENT TO THE MEMORANDUM OF UNDERSTANDING WITH THE SONOMA-MARIN AREA RAIL TRANSIT DISTRICT TO INCLUDE CONSTRUCTION OF TRAFFIC SIGNAL IMPROVEMENTS IN THE AMOUNT OF \$324,876, AND AUTHORIZING CONTINGENCY FUNDS IN THE AMOUNT OF \$55,124, FOR A TOTAL APPROPRIATED AMOUNT OF \$380,000.**

**WHEREAS**, Sonoma-Marín Area Rail Transit (SMART) has begun to construct a rail line from central San Rafael to Larkspur Landing (the “Larkspur Extension”); and

**WHEREAS**, SMART is currently utilizing Stacy and Witbeck/Herzog (SWH) for their design-build contract for the Larkspur Extension project; and

**WHEREAS**, in connection with SMART’s Larkspur Extension project, the City of San Rafael desires to construct traffic signal improvements and install railroad pre-emption at SMART’s railroad crossings on Second and Third Streets per California Public Utilities Commission (CPUC) requirements; and

**WHEREAS**, the City retained Kimley-Horn and Associates to design traffic signal improvements at SMART’s railroad crossings on Second and Third Streets; and

**WHEREAS**, a design for the traffic signal improvements project was completed in October 2018; and

**WHEREAS**, City staff and SMART staff have been working to finalize a second amendment to their March 2017 Memorandum of Understanding, memorializing detailed terms under which the City and SMART will cooperate to incorporate construction of the traffic signal improvements at Second and Third Streets into the Larkspur Extension project, as well as the parties’ understanding regarding responsibilities for future maintenance of the traffic signal improvements that may be located within SMART’s right of way; and

**WHEREAS**, SWH has begun construction of the new rail line and intends to begin work that could incorporate the traffic signal improvements at Second and Third Streets; and

**WHEREAS**, SMART has provided the City with a cost proposal in the amount of \$324,876 to incorporate the traffic signal improvements into the Larkspur Extension project; and

**WHEREAS**, the City Council finds that it is reasonable to waive formal bidding for the construction of the traffic signal improvements and have that work done by SWH. SMART awarded the contract for construction of the Larkspur Extension to SWH through a competitive bidding process, and SWH will be uniquely positioned to perform the construction of the traffic signal improvements so that the rail line and traffic signal work together;

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SAN RAFAEL RESOLVES** as follows:

1. City staff are hereby authorized to work with SMART staff to finalize the terms of the second amendment to the Memorandum of Understanding to authorize construction of the Second and Third Street Traffic Signal Improvements as part of the construction of SMART's Larkspur Extension.
2. The Council hereby waives formal bidding and approves and authorizes the City Manager to execute the finalized second amendment to the Memorandum of Understanding with SMART to authorize SMART to construct the Second and Third Street Traffic Signal Improvements in an amount of \$324,876, and authorizes \$55,124 be made available to use for potential contingencies that arise during construction.
3. The plans and specifications for the Second and Third Street Traffic Signal Improvements, City Project No. 11335, on file in the office of the Department of Public Works, are hereby approved.
4. Funds totaling \$380,000 shall be appropriated from the Traffic Mitigation Fund (#246) to the Second and Third Streets Traffic Signal Improvement Project (Project No. 11335) to accommodate this agreement.

5. The Director of Public Works is hereby authorized to take any and all such actions and make changes as may be necessary to accomplish the purpose of this resolution.

I, **Lindsay Lara**, Clerk of the City of San Rafael, hereby certify that the foregoing resolution was duly and regularly introduced and adopted at a regular meeting of the City Council of said City on the 3<sup>rd</sup> day of December 2018, by the following vote, to wit:

**AYES:**           **COUNCILMEMBERS:**

**NOES:**           **COUNCILMEMBERS:**

**ABSENT:**       **COUNCILMEMBERS:**

---

**Lindsay Lara, City Clerk**

# Stacy and Witbeck, Inc.

## HERZOG

SWH-SMART-074

October 15, 2018

Mr. Bill Gamlen  
Sonoma Marin Area Rail Transit  
5401 Old Redwood Highway  
Petaluma, CA 94954

Reference: SMART Larkspur Extension Project  
Contract No. CV-DB-16-001  
SWH Job No 16507

Subject: **Proposal – Preemption 2<sup>nd</sup> and 3<sup>rd</sup> Street**

Dear Mr. Gamlen,

Stacy and Witbeck/Herzog, a Joint Venture (SWH) submits this proposal to install preemption at 2<sup>nd</sup> and 3<sup>rd</sup> Streets pursuant to City of San Rafael plans prepared by Kimley Horn, dated August 2018. Total price to provide this work is \$324,876.

The following conditions shall apply:

- Pricing assumes that work can be coordinated within existing contract time
  - Actual lead times for materials cannot be determined until submittals are approved and order has been placed (poles are currently 20 to 22 weeks)
  
- SMART/City shall provide the following
  - Layout (survey not included)
  - Any required connection fees
  - All coordination with Golden Gate Bridge if required
  - All coordination with Caltrans, if required
  - Any required permits at no cost, including Caltrans
  
- SWH specifically excludes the following
  - Design coordination with SMART LE Design Build Plans
    - As-builts to be provided in the form of redlines
  - Costs associated with coordination with Golden Gate Bridge
  - Costs associated with contaminated materials
  - Costs associated with rebuilding of ADA access ramps
    - Not indicated on plans, but subject to final pole location by City
  - Any work not specifically covered within this proposal

Should you have any questions please do not hesitate to contact the undersigned.

Sincerely,  
**Stacy and Witbeck/Herzog, A JV**



Nicholas Slama  
Contractors Representative

Attachments: pricing breakdown sheet; MBE pricing dated 9/10/18  
cc: DE, file

# Stacy and Witbeck / HERZOG

A JOINT VENTURE

10/15/2018

SMART Larkspur Extension  
CV-DB-16-001

Cost:	\$ 309,343.40
Markup:	\$ 15,532.50

## COR - 051 - Preemption 2nd and 3rd

	Description	QTY	Hours	Rate/ Cost		Total Amount
<b>A</b>	<b>Labor</b>					
						\$ -
						\$ -
						\$ -
					<b>Subtotal Labor</b>	\$ -
					<b>Labor Surcharge (12%)</b>	\$ -
					<b>Total Labor Cost</b>	\$ -
<b>B.</b>	<b>Equipment</b>					
						\$ -
						\$ -
					<b>Subtotal Equipment</b>	\$ -
<b>C.</b>	<b>Material</b>					
	Dumpfees (assumes going to landfill)	40	cy	\$ 80.00		\$ 3,200.00
	Traffic Control Plans	5	ea	\$ 350.00		\$ 1,750.00
						\$ -
					Tax on Materials ((9%))	INC
					<b>Subtotal Material</b>	\$ 4,950.00
<b>D.</b>	<b>Subcontracts</b>					
	Mike Brown Electric plus 2% bond	1.02	LS	\$ 290,000.00		\$ 295,800.00
	Survey - LAYOUT PROVIDED BY CITY					\$ -
					<b>Subtotal Subcontract</b>	\$ 295,800.00
<b>A.</b>	<b>Subtotal Labor</b>					\$ -
	Labor Markup (22%)					\$ -
					<b>Total Labor</b>	\$ -
<b>B.</b>	<b>Subtotal Equipment</b>					\$ -
	Equipment Markup (15%)					\$ -
					<b>Total Equipment</b>	\$ -
<b>C.</b>	<b>Subtotal Material</b>					\$ 4,950.00
	Material Markup (15%)					\$ 742.50
					<b>Total Material</b>	\$ 5,692.50
<b>D.</b>	<b>Subtotal Subcontract</b>					\$ 295,800.00
	Subcontract Markup (5%)					\$ 14,790.00
					<b>Total Subcontract</b>	\$ 310,590.00
	<b>Subtotal Change Order</b>					\$ 316,282.50
	<b>Insurance (1.7%)</b>					\$ 5,376.80
	<b>Contractor Bond (1.0%)</b>					\$ 3,216.59
	<b>Total Change Order</b>					\$ 324,875.90





**Mike Brown Electric Co.**  
 561-A Mercantile Dr.  
 Cotati, CA 94931-3040  
 (707) 792-8100 · FAX: (707) 792-8110  
 Cont. Lic. #306767  
 D.I.R. #1000000469

PROJECT: SMART Larkspur Extension – 2<sup>nd</sup> & 3<sup>rd</sup> St  
 Preemption – MBE PCO 41  
 LOCATION: San Rafael  
 BID DATE: 9/10/18  
 CONTRACT:

Date: 9/10/18  
 To: Dan Elshire – Stacy and Witbeck/Herzog  
 From: Austin Smith

**THE FOLLOWING IS OUR BID FOR THE ABOVE-REFERENCED PROJECT**

Bid Item	Description	Quantity	Unit Price	Total
	Pedestrian Safety Lighting and Crosswalk *	Lump		\$290,000.00
	*Bid based on Kimley Horn plan sheets TS-1 through TS-5 and CD-1, all dated August 2018.			
	No specifications provided to apply to this bid.			

Total Base Bid: \$290,000.00

- Note:
1. Bid Based on Monthly Progress Payments with Final Payment (including retention) due 30 days after acceptance of our work by the owner.
  2. Any Plan changes or specifications issued for this scope of work/plan sheets will require re-quoting and/or additional compensation for changes made.

**Addenda's Noted:**

- Excludes:**
- 1) Layout/Staking
  - 2) Permits/Fees including Caltrans
  - 3) Bond
  - 4) Traffic Control Plans
  - 5) Off Haul of Spoils
  - 6) PG &E Fees (if any)
  - 7) Hazardous Waste Removal

**AMENDMENT NO. 2 TO MOU  
SMART AND CITY OF SAN RAFAEL**

**THIS AMENDMENT NO. 2** to the MOU dated March 14, 2017, is entered into as of this \_\_\_ date of \_\_\_\_\_, 20\_\_\_, by and between the Sonoma-Marín Area Rail Transit District, a public entity duly established under the laws of California (“SMART”) and the City of San Rafael, a California charter city (“City”), (collectively referred to as the (“Parties”).

**RECITALS**

1. On March 14, 2017, the Parties entered into a Memorandum of Understanding Regarding Cooperation on Construction of the SMART Larkspur Extension Project (the “March 14, 2017 MOU”).
2. Pursuant to the March 14, 2017 MOU, the Parties included the City’s Andersen Drive Crossing Project and the Francisco Boulevard West Realignment Project as part of the SMART Larkspur Extension Project. The Parties agreed that SMART’s contractor shall perform the work to maximize efficiencies.
3. On July 15, 2018, the Parties agreed to amend the March 14, 2017 MOU (Amendment No. 1) to include the City’s Andersen Drive to Rice Drive Multi-use Pathway Project as part of the Larkspur Extension Project.
4. The City has requested that SMART also include the City’s Second and Third Street At-Grade Railroad Crossing Improvements Project as part of the Larkspur Extension Project.
5. SMART has obtained a proposal from its contractor, which has been reviewed and approved by the City, and has agreed to include the Second and Third Street At-Grade Railroad Crossing Improvements Project into the Larkspur Extension Project through a Change Order;

**AGREEMENT**

**NOW, THEREFORE**, for good and valuable consideration the receipt and adequacy of which are hereby acknowledged, SMART and the City agree as follows

**SECTION 1.** The March 14, 2017 MOU, as amended by Amendment No. 1, is hereby amended to add new Article VI, to read as follows:

## ARTICLE VI

### 1. Recitals

- A. The above recitals are true and correct and are hereby incorporated in and expressly form a part of this Agreement.

### 2. Scope of Work

The Parties desire to make the following improvements as part of the SMART Larkspur Extension Project:

Second and Third Street At-Grade Railroad Crossing Improvements Project. The work includes the installation of traffic signal poles and railroad pre-emption in connection with SMART's rail system at the at-grade crossings on Second and Third Streets in San Rafael. The elements that make up the project include, but are not limited to, traffic signal poles, conduit, conductors, electronic blank out signs, CCTV cameras, vehicle detector loops, and other supporting items. Specifics of the project are detailed in the construction documents in Exhibit A to this Amendment No. 2.

### 3. City's Responsibilities

City shall be responsible for the following with respect to the Second and Third Street At-Grade Railroad Crossing Improvements Project:

- A. **Payment:** City shall be responsible for paying all costs associated with constructing the Second and Third Street At-Grade Railroad Crossing Improvements Project. City shall also be responsible for paying all potential, but presently unknown costs such as those associated with the removal of hazardous materials or differing site conditions or delays which may arise as part of constructing that Project. The parties agree that the presently known costs for the Second and Third Street At-Grade Railroad Crossing Improvements Project will cost Three-Hundred Twenty-Four Thousand Eight Hundred Seventy-Six Dollars (\$324,876) plus up to an additional 17% contingency. The costs are shown in Exhibit B to this Amendment No. 2. SMART shall bill City for progress payments during the course of construction, and City pay such invoices in full within 30 days of receipt.
- B. **CPUC:** City shall be responsible for securing approval from the California Public Utilities Commission (CPUC) for the Second and Third Street At-Grade Railroad

Crossing Improvements Project in the form of approved General Order 88-Bs. The City shall comply with all CPUC conditions of approval at its own expense.

- C. Final Plans, Specifications and Estimate of Costs:** City has prepared construction documents including plans, specifications, and an engineer's estimate for the work. At the City's request, SMART has included the construction documents through a Change Order in SMART's design-build contract for the SMART Larkspur Extension Project. The construction documents are included and incorporated hereto as Exhibit A to this Amendment No. 2.
- D. Environmental Documentation and Regulatory Permits:** City has or shall obtain all required environmental clearances and regulatory permits for the Second and Third Street At-Grade Railroad Crossing Improvements Project. City shall provide SMART with all required documentation prior to the start of construction. City understands that failure to provide these documents could delay construction which could generate delay costs that would be the City's sole responsibility.
- E. Notification:** City shall be responsible for any public outreach it determines to be necessary, including notifications to the public of work to be performed on the Second and Third Street At-Grade Railroad Crossing Improvements Project.
- F. Utilities:** City shall be responsible for utility investigation and conflict resolution and/or utility relocations according to the planned work and consistent with the project schedule.
- G. Road Closure:** As set forth in Article V, Section 3. F., of Amendment No. 1, City grants approvals for a complete road closure for one weekend (Friday @ 20:00 to Monday @ 05:00) for the reconstruction of the track crossing of Second Street and an additional weekend closure for reconstruction of the track crossing Third Street at no cost to SMART. No additional permits or approvals will be required. However, no construction may take place between Thanksgiving Day and New Year's Day. The City has a moratorium on construction in the downtown area during this period.

It is anticipated that SMART's contractor will construct to the greatest extent feasible those portions of the City's Second and Third Street At-Grade Railroad Crossing Improvements Project during the road closure and will minimize the number of lane closures on Second or Third Streets during daytime hours outside of the full road closure. At no time shall full road closures of Second and Third Streets be permitted to occur at the same time.

- H. **Quiet Zone:** The City is responsible for any improvements that may be necessary if the City chooses to pursue a quiet zone for the Second and Third Street at-grade crossings.
- I. **Inspection:** City may inspect, at its expense, the Second and Third Street At-Grade Railroad Crossing Improvements Project during construction and at the conclusion of the construction work. The City may not direct SMART's contractor.
- J. **Ownership and Maintenance:** City shall own, operate and maintain the City funded railroad pre-emption traffic signal systems, including, but not limited to, traffic signal poles, conduits, conductors, electronic blank out signs, CCTV cameras, and any other element directly related to providing a complete and functioning traffic signal system. at the railroad crossings on Second and Third Streets.

#### 4. **SMART's Responsibilities**

SMART shall be responsible for the following as to the Second and Third Street At-Grade Railroad Crossing Improvements Project:

- A. **Design-Build Contract:** SMART shall include by Change Order the Second and Third Street At-Grade Railroad Crossing Improvements Project improvements as part of the planned design-build contractor procurement for the SMART Larkspur Extension Project.
- B. **Procedures:** SMART shall prepare and submit to the City change orders that would be required to complete the Second and Third Street At-Grade Railroad Crossing Improvements Project for review and approval before said work occurs. [City shall review and approve change orders within 15 working days.]

**SECTION 2.** Except as otherwise provided herein, all terms and conditions of the March 14, 2017 MOU, as amended by the July 15, 2018 Amendment No. 1 shall remain in full force and effect and shall apply to the Second and Third Street At-Grade Railroad Crossing Improvements Project.

**IN WITNESS WHEREOF**, SMART and the City have executed this Amendment No. 2 as of the date first above written.

CITY OF SAN RAFAEL

SONOMA-MARIN AREA RAIL TRANSIT  
DISTRICT

By: \_\_\_\_\_  
Jim Schutz, City Manager

By: \_\_\_\_\_  
Farhad Mansourian, General Manager

ATTEST:

\_\_\_\_\_  
Lindsay Lara, City Clerk

APPROVED AS TO FORM  
FOR CITY:

APPROVED AS TO FORM FOR SMART

\_\_\_\_\_  
Robert F. Epstein, City Attorney

\_\_\_\_\_  
SMART General Counsel



EXHIBIT A

Construction Documents

DRAFT

EXHIBIT B

Second and Third Street At-Grade Railroad Crossing Improvements Project  
Estimated Project Budget

<b>Description</b>	<b>Costs</b>
SMART Contract Change Order	\$324,876.00
Contingency (17%)	\$55,124.00
<b>Budget Total</b>	<b>\$380,000.00</b>

DRAFT

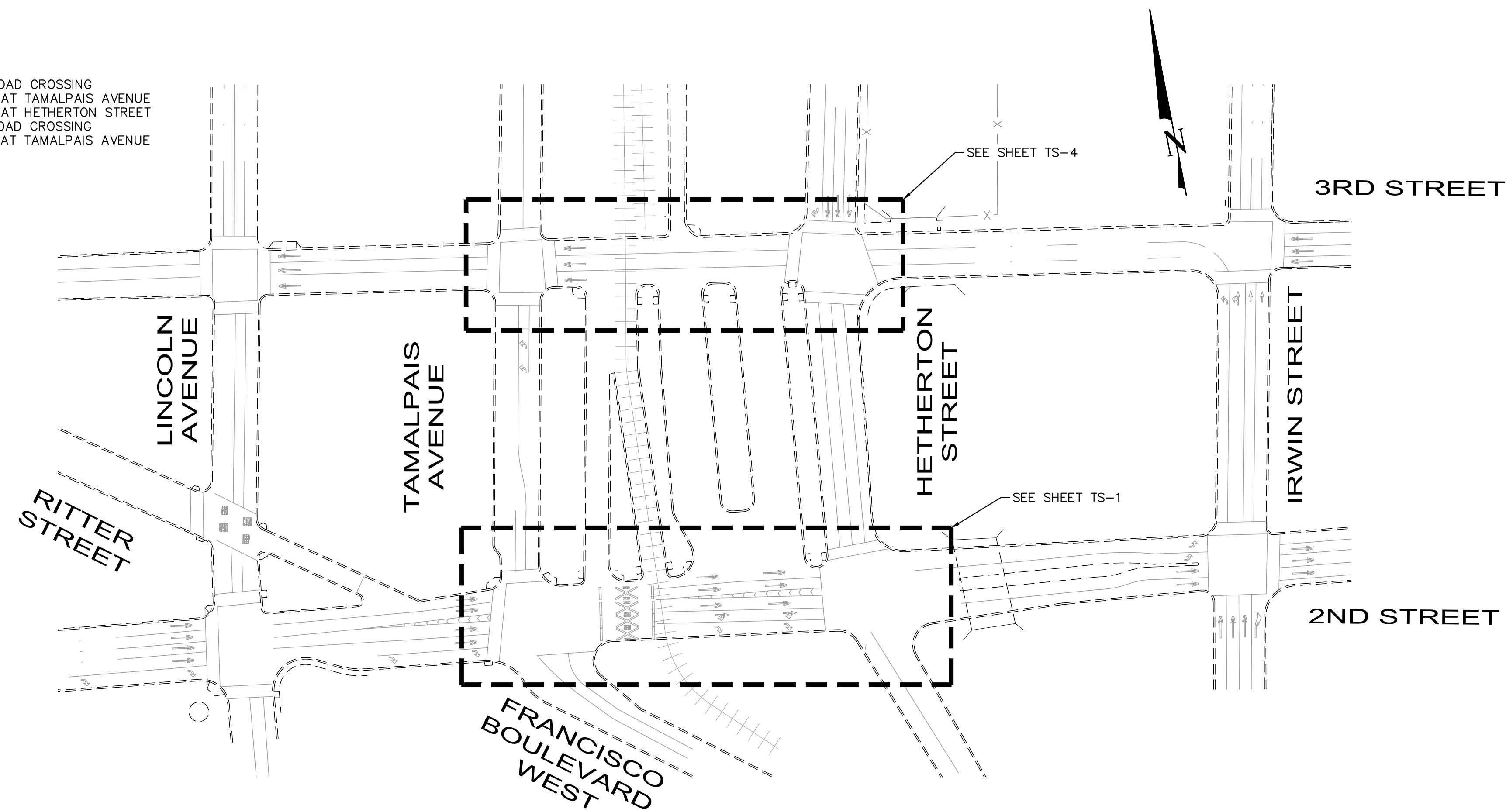
# CITY OF SAN RAFAEL 2ND AND 3RD STREETS AT-GRADE RAILROAD CROSSING IMPROVEMENTS

CITY PROJECT NO. 11335

CITY FILE NO. 18.01.84

**INDEX OF SHEETS**

SHEET #	SHEET DESIGNATION	SHEET TITLE
1	CV-1	COVER SHEET
2	GN-1	NOTES, LEGEND, ABBREVIATIONS
3	TS-1	TRAFFIC SIGNAL PLAN - 2ND STREET RAILROAD CROSSING
4	TS-2	TRAFFIC SIGNAL SCHEDULES - 2ND STREET AT TAMALPAIS AVENUE
5	TS-3	TRAFFIC SIGNAL SCHEDULES - 2ND STREET AT HETHERTON STREET
6	TS-4	TRAFFIC SIGNAL PLAN - 3RD STREET RAILROAD CROSSING
7	TS-5	TRAFFIC SIGNAL SCHEDULES - 3RD STREET AT TAMALPAIS AVENUE
8	CD-1	CONSTRUCTION DETAILS



**ISSUED FOR  
CONSTRUCTION  
SEPTEMBER 2018**

APPROVED:

Kevin McGowan, P.E.

Assistant Public Works Director / City Engineer  
City of San Rafael



PROJECT NAME <b>2ND AND 3RD STREETS AT-GRADE RAILROAD CROSSING IMPROVEMENTS</b>	MFF TSW KGA	NO. REVISION	BY DATE	DATE
DRAWING NAME <b>COVER SHEET</b>	DESIGNED DRAWN CHECKED APPROVED	NO. REVISION	BY DATE	DATE
COUNTY OF MARIN CALIFORNIA				

**Kimley»Horn**

1300 CLAY STREET, SUITE 325  
OAKLAND, CA, 94612  
TEL: (510) 825-0712  
©2018

CITY OF SAN RAFAEL  
DEPARTMENT OF PUBLIC WORKS



SCALE: AS NOTED
DATE: SEPTEMBER 2018
CITY PROJECT NO. 11335
SHEET NO. <b>CV-1</b>
DRAWING 1 OF 8



**GENERAL NOTES**

- INSPECT AND VERIFY ALL FIELD CONDITIONS BEFORE BIDDING.
- ALL NEW PULL BOXES SHALL BE No. 6 UNLESS OTHERWISE NOTED ON PLAN.
- LOCATIONS OF POLES, PULL BOXES, CONDUIT, HAND HOLES, AND OTHER EQUIPMENT SHOWN ON THE PLANS ARE SCHEMATIC (UNLESS OTHERWISE NOTED). APPROXIMATE AND SHALL BE LOCATED IN THE FIELD BY THE ENGINEER. BEFORE BEGINNING ANY CONSTRUCTION OPERATION, THE CONTRACTOR SHALL CHECK FOR CONFLICTS WITH UNDERGROUND OR OVERHEAD UTILITIES OR OTHER OBSTACLES. POLE LOCATIONS SHALL BE DETERMINED PRIOR TO DRILLING FOR FOUNDATIONS. UNLESS OTHERWISE DIRECTED BY ENGINEER, POLES WITH PEDESTRIAN PUSH BUTTONS OR ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE WITHIN 5' FROM CROSSWALK.
- THE LOCATION OF EXISTING UTILITIES AND RIGHT OF WAY SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE RESPECTIVE UTILITY COMPANIES AND AFFECTED AGENCIES FOR VERIFICATION OF LOCATION AND DEPTHS OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICES ALERT (U.S.A.) 48 HOURS PRIOR TO DOING ANY WORK. TELEPHONE 800-227-2600. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL REQUIRED CLEARANCES FROM OVERHEAD AND UNDERGROUND UTILITIES.
- ALL STANDARD CONDUIT RUNS ARE SCHEMATIC ONLY. ALL CONDUITS SHALL BE 3" UNLESS OTHERWISE NOTED ON PLAN OR DIRECTED BY THE ENGINEER.
- ALL WORK MATERIAL AND EQUIPMENT SHALL CONFORM TO THE REQUIREMENTS OF THE MOST RECENT CALIFORNIA DEPARTMENT OF TRANSPORTATION REVISED STANDARD PLANS AND SPECIFICATIONS UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL DELIVER ALL SALVAGED EQUIPMENT TO THE CITY DESIGNATED AREA OR AS DIRECTED BY THE ENGINEER.
- UPON COMPLETION OF THE WORK THE CONTRACTOR SHALL CERTIFY THAT ALL WORK WAS PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. VARIATIONS SHALL BE DECLARED AND PRESENTED TO THE ENGINEER ON MARKED-UP DRAWINGS UPON COMPLETION OF THE CONSTRUCTION. THE CONTRACTOR SHALL SHOW THE CHANGES ON THE PLANS.
- CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR WORKING CONDITIONS ON THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL NOT BE LIMITED TO NORMAL WORKING HOURS. WORK SHALL NOT BEGIN UNTIL ADEQUATE TEMPORARY BARRICADES, BARRIERS, FENCES, WARNING AND CONTROL DEVICES ARE IN PLACE AS REQUIRED BY THE CONTRACT. THE TRAFFIC CONTROL DEVICES SHALL BE OPERATIONAL AND IN GOOD WORKING CONDITIONS AT ALL TIMES.
- CONTRACTOR SHALL REPAIR, REPLACE AND RELOCATE ALL LANDSCAPING, IRRIGATION, CURBS, SERVICES, SIDEWALK, ETC., DAMAGED DURING CONSTRUCTION AND NOT IDENTIFIED ON THE PLANS FOR REMOVAL AT NO ADDITIONAL COST TO THE CITY.
- CONTRACTOR SHALL REPAIR/REPLACE SIDEWALK IN AREAS WHERE NEW CONDUIT AND EQUIPMENT FOUNDATIONS ARE INSTALLED OR REMOVED AT NO ADDITIONAL COST TO THE CONTRACT. REPLACEMENTS SHALL INCLUDE ENTIRE PANELS AND MATCH EXISTING SCORE PATTERNS AND SURFACE COLOR AND TEXTURE. REPAIR OF PARTIAL PANELS IS PROHIBITED.
- EXISTING CITY AND PG&E LIGHTING CONDUCTORS WHICH ARE NOT IDENTIFIED FOR REMOVAL SHALL BE PROTECTED IN PLACE DURING CONSTRUCTION.
- ANY DAMAGE TO THE CITY'S OR CALTRANS' ELECTRICAL SYSTEMS AND/OR EQUIPMENT WHICH ARE NOT IDENTIFIED ON THE PLANS FOR REMOVAL BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AND/OR REPLACED AT THE CONTRACTOR'S EXPENSE AND THE CITY SHALL BE PROMPTLY NOTIFIED. ANY REPAIRS AND/OR REPLACEMENTS TO THE CITY'S OR CALTRANS' ELECTRICAL SYSTEMS AND/OR EQUIPMENT SHALL BE APPROVED AND INSPECTED BY THE CITY.
- ALL UNDERGROUND NONMETALLIC CONDUIT INSTALLED BY THE CONTRACTOR SHALL CONTAIN ONE BARE NO. 8 AWG STRANDED COPPER BONDING/ LOCATING/ PULL WIRE.
- CONTRACTOR SHALL KEEP THE CONSTRUCTION SITE CLEAR OF ALL DEBRIS AND MAINTAIN SAFETY AT ALL TIMES.
- CONTRACTOR SHALL COORDINATE THE RELOCATION, MODIFICATION AND/OR REPLACEMENT OF EXISTING ELECTRICAL SERVICES WITH THE SERVING UTILITY COMPANY.
- TRAFFIC CONTROL MUST BE PERFORMED IN ACCORDANCE WITH THE CA MUTCD. SEE SPECIFICATIONS FOR WORK HOURS.
- CONTRACTOR SHALL BACK FILL WITH CUTBACK EACH NIGHT ANY AREAS NOT COMPLETED TO FINISHED STATE. ALL EXCAVATED AREAS SHALL BE PROTECTED FROM PEDESTRIAN AND VEHICULAR TRAFFIC AT ALL TIMES.
- CONTRACTOR SHALL, BY HAND, POTHOLE EXISTING UTILITIES TO VERIFY LOCATIONS PRIOR TO CONSTRUCTION.
- ALL NEW VEHICLE AND PEDESTRIAN INDICATIONS SHALL BE LED.
- CONTRACTOR SHALL ADJUST TO GRADE ALL EXISTING PULL BOXES WITHIN NEW SIDEWALK AND CURB RAMP AREAS UNLESS OTHERWISE NOTED ON THE PLAN TO BE RELOCATED OR REMOVED.
- ALL EXISTING COMMUNICATION SHALL REMAIN OPERATIONAL UNTIL SUCH A TIME THAT A CUTOVER TO THE FIBER SYSTEM NETWORK IS READY.
- TRAFFIC SIGNAL DRAWINGS ARE SCHEMATIC IN NATURE. THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTING A COMPLETE AND FUNCTIONAL TRAFFIC SIGNAL ACCORDING TO CITY OF SAN RAFAEL SPECIFICATIONS. ANY PERCEIVED ANOMALIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN A TIMELY MANNER.
- WORDING AND SPELLING OF STREET NAMES ON SNS SHALL BE VERIFIED WITH THE CITY OF SAN RAFAEL PRIOR TO ORDERING EQUIPMENT.
- CONTRACTOR SHALL PLACE POLE NUMBERS ON STREET LIGHT POLES IN ACCORDANCE WITH PG&E REQUIREMENTS.
- CONTRACTOR SHALL RELOCATE EXISTING IRRIGATION SYSTEMS AS NECESSARY TO CONSTRUCT THE PROPOSED TRAFFIC SIGNAL.
- IF THE CONTRACTOR'S OPERATIONS DAMAGE THE EXISTING IRRIGATION SYSTEMS, THE CONTRACTOR SHALL REPAIR OR REPLACE THE DAMAGED IRRIGATION SYSTEMS.
- CONDUITS PARALLEL TO THE ROADWAY SHALL BE INSTALLED AT THE LIP OF GUTTER UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- CONTRACTOR SHALL LOCATE AND MARK ALL POLES AND OBTAIN FINAL APPROVAL PRIOR TO INSTALLATION.
- CONTRACTOR SHALL COIL FIBER OPTIC CABLE SLACK AS FOLLOWS: 150 FEET OF TRUNK CABLE SLACK AND 50 FEET OF 12-STRAND (DROP CABLE) SLACK IN FIBER OPTIC PULL BOXES, 10 FEET OF 12-STRAND SLACK IN HOME RUN PULL BOXES, 20 FEET OF 12-STRAND SLACK IN BASE OF CONTROLLER CABINETS, AND 10 FEET OF TRUNK CABLE SACK IN PASS-THROUGH No. 6E PULL BOXES.
- CONTRACTOR SHALL INSTALL BARE SOLID #8 AWG GROUND WIRE IN ALL NEW CONDUITS AND BONDED TO GROUND ROD AT EACH SIGNALIZED INTERSECTION.
- CONCRETE ANCHOR REINFORCEMENT MUST BE LOCATED BY NONDESTRUCTIVE MEANS BEFORE INSTALLING HOLES FOR ANCHORS. ROTARY DRILLS MUST BE USED, NO IMPACT DRILLS OR CORING. IF REINFORCEMENT IS ENCOUNTERED, THE ANCHOR HOLE SHALL BE ABANDONED, PATCHED, AND A NEW HOLE INSTALLED. ANCHOR BOLTS MUST BE ON CALTRANS AUTHORIZED MATERIALS LIST.
- CONTRACTOR SHALL HAVE A CITY REPRESENTATIVE ON SITE FOR ALL BORING ACTIVITIES.
- ALL NEW PULL BOXES TO BE PLACED APPROXIMATELY 400' APART UNLESS OTHERWISE NOTED IN PLAN. FINAL LOCATION AS APPROVED BY THE ENGINEER.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DISABLED ACCESS AT ALL TIMES INCLUDING, BUT NOT LIMITED TO ALTERNATIVE WHEELCHAIR ACCESSIBLE ROUTES AND CANE-DETECTABLE ELEMENTS TO WARN AND GUIDE PEDESTRIANS WITH VISION IMPAIRMENTS. ACCESSIBILITY PROVISIONS MUST CONFORM TO AND BE PROVIDED IN ACCORDANCE WITH CA MUTCD SECTIONS 6D.01, 6D.02, 6D.101, AND 6F.68; SECTIONS R205 AND R302 OF THE US ACCESS BOARD'S "REVISED DRAFT GUIDELINES FOR ACCESSIBLE PUBLIC RIGHTS-OF-WAY"; CITY OF SAN RAFAEL TRAFFIC CONTROL SPECIFICATIONS; AND GENERAL PROVISIONS OF THE ADA STANDARDS AND CHAPTER 11B OF THE CALIFORNIA BUILDING CODE.
- WEBSITES FOR ADA STDS AND CBC ACCESS PROVISIONS:  
[HTTP://WWW.USDOJ.GOV/CRT/ADA/REG3A.HTML#ANCHOR-17383](http://www.usdoj.gov/crt/ada/reg3a.html#anchor-17383)  
[HTTP://WWW.DOCUMENTS.DGS.CA.GOV/DSA/PUBS/ACCESS-MANUAL\\_06-16-06.PDF](http://www.documents.dgs.ca.gov/dsa/pubs/access-manual_06-16-06.pdf)

**ABBREVIATIONS**

APS	ACCESSIBLE PEDESTRIAN SIGNAL
C	CONDUIT
CCTV	CLOSED-CIRCUIT TELEVISION
CTV	CABLE TELEVISION
DWG	DRAWING
DWY	DRIVEWAY
EX/Ex.	EXISTING
FH	FIRE HYDRANT
FO	FIBER OPTIC
FT	FOOT
LF	LINEAR FOOT
MAX.	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MT	EMPTY
NIC	NOT IN CONTRACT
No.	NUMBER
NPS	NOMINAL PIPE SIZE
N.T.S.	NOT TO SCALE
PEU	PHOTOELECTRIC UNIT
PG&E	PACIFIC GAS & ELECTRIC
PTZ	PAN-TILT-ZOOM
RR	RAILROAD
R/W	RIGHT OF WAY
SD	STORM DRAIN
SIC	SIGNAL INTERCONNECT CABLE
SMFO	SINGLE MODE FIBER OPTIC
SNS	STREET NAME SIGN
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEANOUT
TOS	TRAFFIC OPERATIONS SYSTEM
TS	TRAFFIC SIGNAL
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
VAR	VARIES

**LEGEND**

PROPOSED	EXISTING	
		CONDUIT
		FACE OF CURB
		LIP OF GUTTER
		BACK OF SIDEWALK
		FRONT OF SIDEWALK
		DRIVEWAY
		RIGHT-OF-WAY
		PUBLIC UTILITY EASEMENT
		FIBER OPTIC LINE
		OVERHEAD ELECTRICAL LINE
		TELEPHONE LINE
		SANITARY SEWER LINE AND MANHOLE
		STORM SEWER LINE AND MANHOLE
		WATER LINE
		ELECTRICAL LINE
		GAS LINE
		CABLE TELEVISION LINE
		POWER POLE
		LUMINAIRE
		PULL BOX (NO. 3 AND NO. 5)
		PULL BOX (NO. 6 AND NO. 6E)
		FO PULL BOX (N48)
		TRAFFIC SIGNAL POLE
		TRAFFIC SIGNAL CONTROLLER CABINET
		SERVICE ENCLOSURE
		DETECTION LOOP
		DETECTOR HANDHOLE
		PTZ CCTV CAMERA
		BLANKOUT SIGN
		VEHICLE SIGNAL HEAD
		VEHICLE SIGNAL HEAD WITH PROGRAMMED VISIBILITY
		PEDESTRIAN SIGNAL HEAD (COUNTDOWN TYPE)
		RAILROAD GATE



**ISSUED FOR  
CONSTRUCTION  
SEPTEMBER 2018**

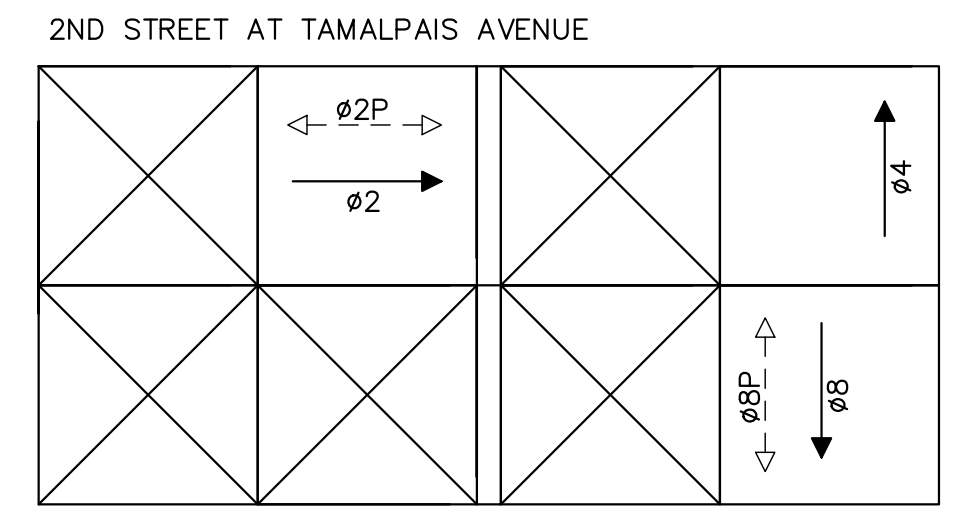


DATE	BY	REVISION	NO.	MFF	TSW	KGA	DATE
PROJECT NAME <b>2ND AND 3RD STREETS AT-GRADE RAILROAD CROSSING IMPROVEMENTS</b>				DRAWING NAME <b>NOTES, LEGEND, ABBREVIATIONS</b>			
				CITY OF SAN RAFAEL DEPARTMENT OF PUBLIC WORKS			
1300 CLAY STREET, SUITE 325 OAKLAND, CA 94612 TEL: (510) 826-0712 ©2018				SAN RAFAEL COUNTY OF MARIN CALIFORNIA			
SCALE: AS NOTED							
DATE: SEPTEMBER 2018							
CITY PROJECT NO. 11335							
SHEET NO. GN-1							
DRAWING 2 OF 8							

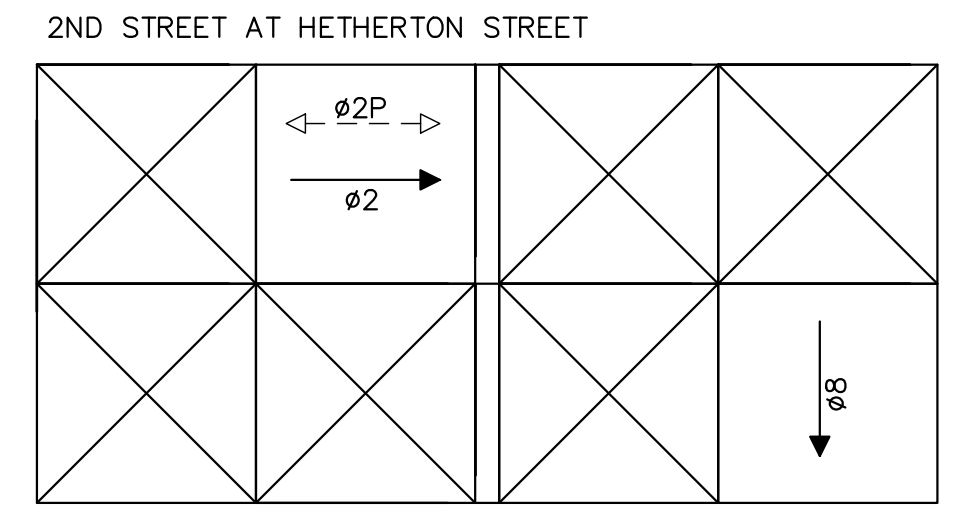
KIMLEY-HORN AND ASSOCIATES, INC. 1485 THURSDAY DRIVE, SAN RAFAEL, CA 94901-1202 TEL: (415) 470-2000 FAX: (415) 470-2001



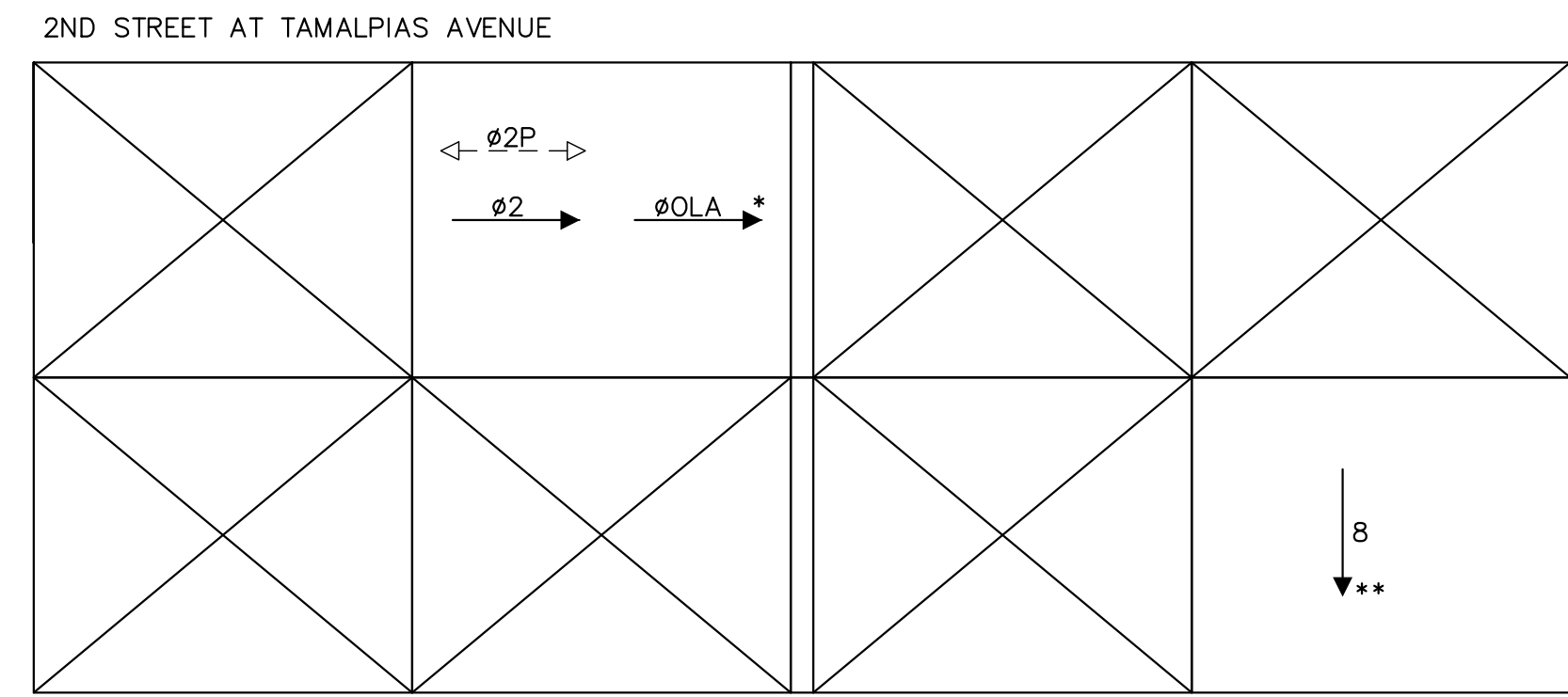
**EXISTING PHASE DIAGRAM**



**EXISTING PHASE DIAGRAM**



**PROPOSED PHASE DIAGRAM**



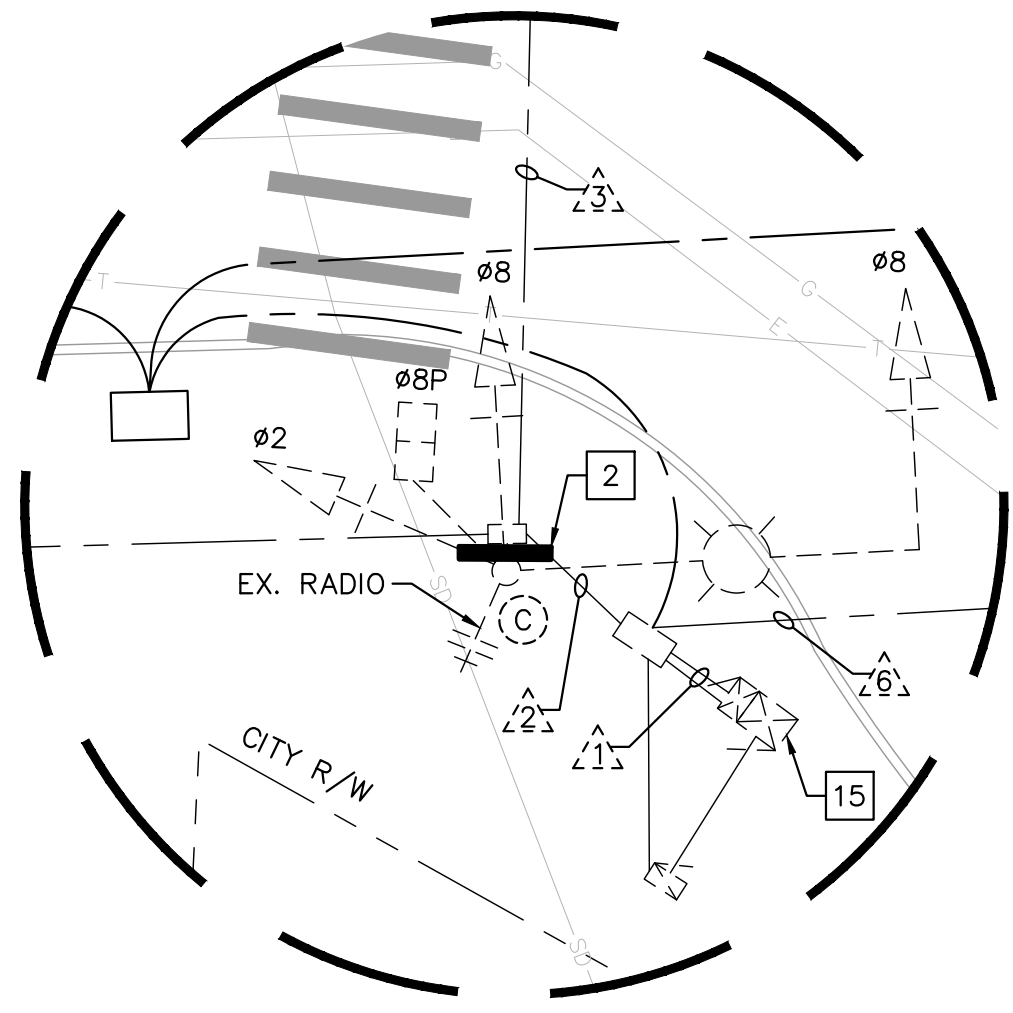
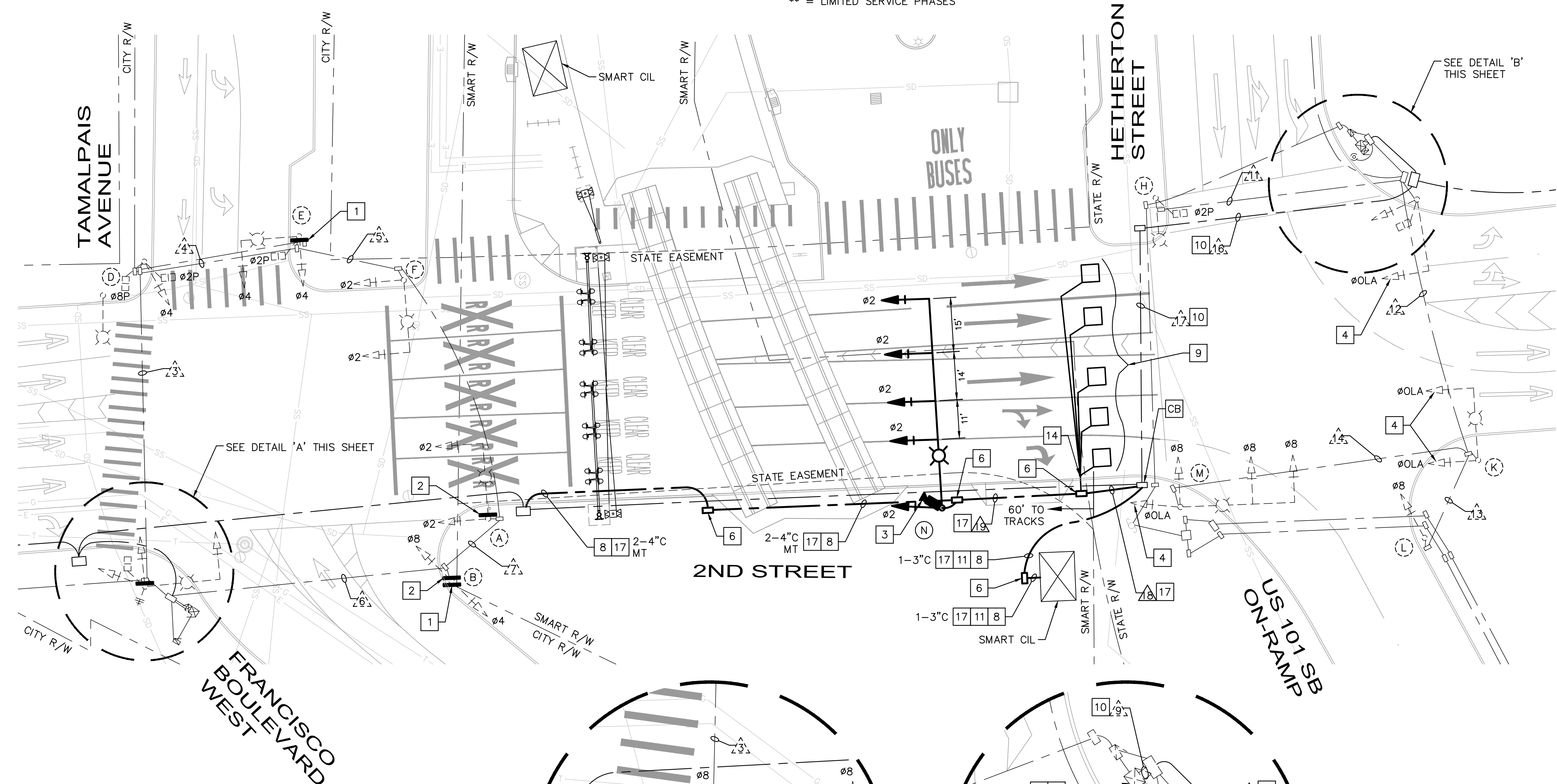
\* = ø6 + GREEN EXTENSION  
 \*\* = LIMITED SERVICE PHASES

**GENERAL NOTES:**

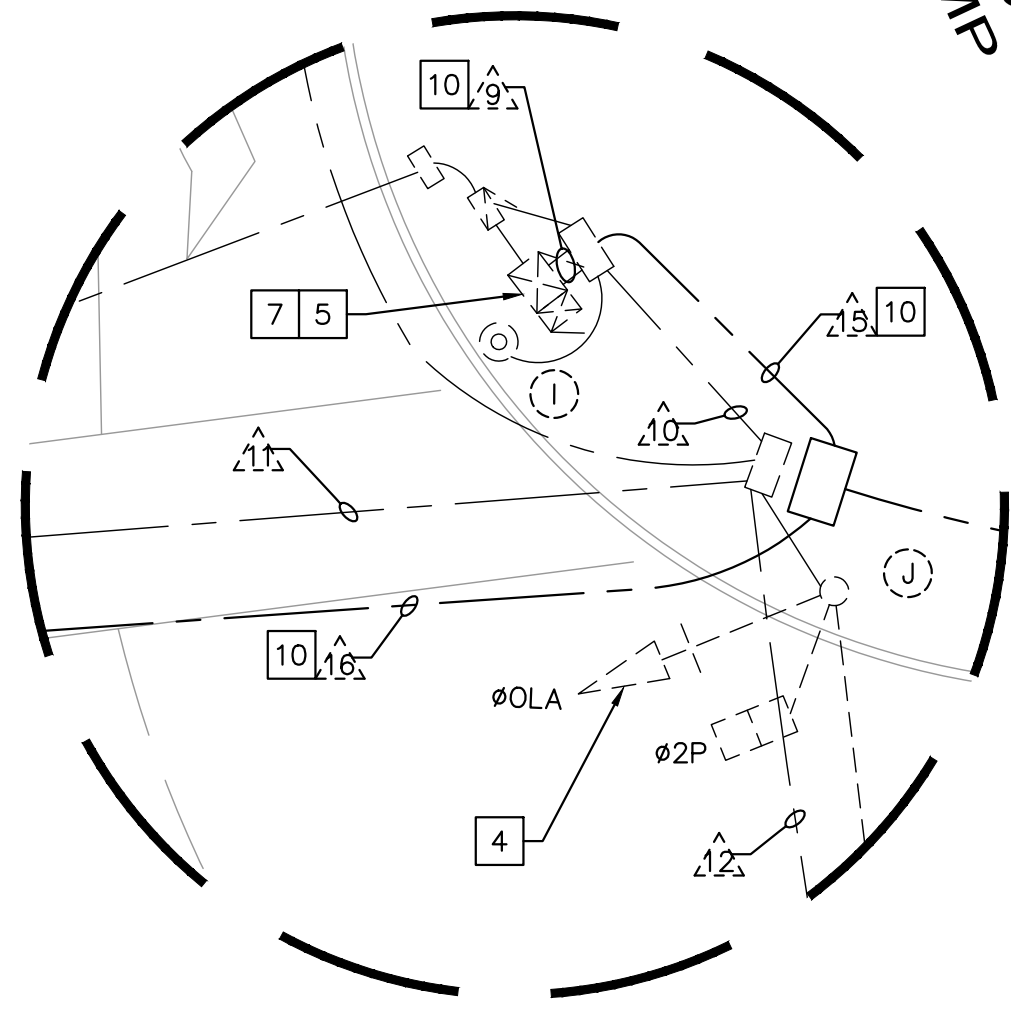
1. ALL PULL BOXES SHALL BE No. 6 UNLESS NOTED OTHERWISE.
2. STRIPING IMPROVEMENTS PART OF SEPARATE PROJECT SHOWN HEREON AS REFERENCE ONLY.

**CONSTRUCTION NOTES:**

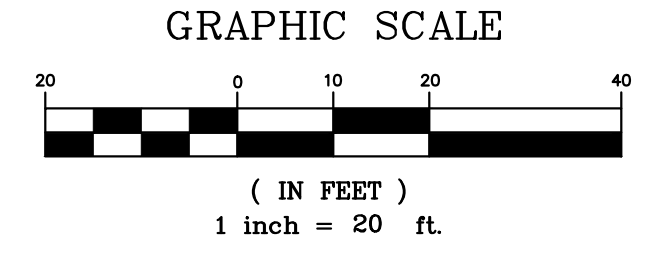
- 1 FURNISH AND INSTALL R3-1 (RIGHT) BLANK-OUT SIGN ON EXISTING SIGNAL POLE PER DETAIL ON CD-1.
- 2 FURNISH AND INSTALL R3-2 (LEFT) BLANK-OUT SIGN ON EXISTING SIGNAL POLE PER DETAIL ON CD-1.
- 3 FURNISH AND INSTALL PTZ CCTV CAMERA ON SIGNAL POLE. SEE DETAIL SHEET CD-1 FOR MOUNTING DETAILS.
- 4 REASSIGN EXISTING SIGNAL HEAD TO OVERLAP A.
- 5 INSTALL CITY FURNISHED RAILROAD PREEMPTION PANEL AND HEALTH CIRCUIT PANEL IN EXISTING CABINET.
- 6 FURNISH AND INSTALL PULL BOX PER CALTRANS REVISED STANDARD PLAN RSP ES-8A.
- 7 INSTALL CITY FURNISHED POWER SUPPLY IN EXISTING CONTROLLER CABINET FOR PREEMPTION PURPOSES.
- 8 FURNISH AND INSTALL PVC SCHEDULE 80 CONDUIT. QUANTITY AND SIZE SHOWN ON PLANS.
- 9 FURNISH AND INSTALL PAVEMENT LOOPS FOR QUEUE CUTTING. ALL LOOPS SHALL BE ON SEPARATE CHANNELS AND HAVE THEIR OWN SEPARATE DETECTION LEAD IN CABLE TO THE CONTROLLER CABINET. CONTRACTOR SHALL INSTALL CITY FINISHED DETECTOR LOOP CARDS IN CONTROLLER CABINET.
- 10 FURNISH AND INSTALL 12#14 AWG RAILROAD PREEMPTION CABLE IN FABRIC INNERDUCT IN EXISTING CONDUIT. CONTRACTOR SHALL COORDINATE WITH SMART AND THE CITY FOR RAILROAD PREEMPTION CONNECTION.
- 11 FURNISH AND INSTALL 12#14 AWG RAILROAD PREEMPTION CABLE IN NEW CONDUIT. CONTRACTOR SHALL COORDINATE WITH SMART AND THE CITY FOR RAILROAD PREEMPTION CONNECTION.
- 14 FURNISH AND INSTALL DETECTOR HANDHOLE.
- 15 INSTALL CITY FURNISHED LOAD SWITCHES FOR BLANKOUT SIGNS IN EXISTING CABINET.
- 17 FURNISH AND INSTALL 3-CELL FABRIC INNERDUCT WITH PULL ROPES IN NEW CONDUIT.



**DETAIL 'A'**  
 SCALE: 1" = 10'



**DETAIL 'B'**  
 SCALE: 1" = 10'



THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY



**ISSUED FOR CONSTRUCTION SEPTEMBER 2018**

NO.	REVISION	BY	DATE

**PROJECT NAME**  
 2ND AND 3RD STREETS AT-GRADE RAILROAD CROSSING IMPROVEMENTS

**DRAWING NAME**  
 2ND STREET RAILROAD CROSSING

SAN RAFAEL COUNTY OF MARIN CALIFORNIA

**Kimley»Horn**

1300 CLAY STREET, SUITE 325  
 OAKLAND, CA, 94612  
 TEL: (510) 825-0712  
 @2018

**CITY OF SAN RAFAEL  
 DEPARTMENT OF PUBLIC WORKS**

SCALE: AS NOTED
DATE: SEPTEMBER 2018
CITY PROJECT NO. 11335
SHEET NO. TS-1
DRAWING 3 OF 8

CA: 0081 - 11/24/2018 1:08 PM  
 P:\V\K\15107022602 - San Rafael 2nd St. 3rd Queue Cutters - KGA\CA\0\Sheet\3 TRAFFIC SIGNAL PLAN 2ND STREET RAILROAD CROSSING.dwg



AWG OR CABLE	2ND STREET AT TAMALPAIS AVENUE CONDUCTOR SCHEDULE								
	CONDUCTOR DESIGNATION	NUMBER OF CONDUCTORS							
		RUN NUMBER							
		1	2	3	4	5	6	7	8
NO. 14	#2	6	3	3	3	3	3	3	3
	#4	6	3	3	3	3	3	3	3
	#8	2	2	2	2	2	2	2	2
	#2P	2	2	2	2	2	2	2	2
	#8P	2	2	2	2	2	2	2	2
PEU	3	3	3	3	3	3	3	3	3
BLANKOUT	(8)	(4)	(2)	(2)	-	(4)	(2)	-	-
TOTAL NO. 14	30	20	12	10	3	13	5	3	3
NO. 8	SIGNAL COMMON BOND	1	1	1	1	1	1	1	1
	TOTAL NO. 8	1	2	2	2	2	2	2	2
NO. 10	STREET LIGHTING	-	2	2	2	2	2	2	2
	TOTAL NO. 10	-	2	2	2	2	2	2	2
SMFO	FIBER OPTIC CABLE	1	-	-	-	-	-	-	-
RADIO	ETHERNET CABLE	1	1	-	-	-	-	-	-
CCTV	CCTV POWER	-	-	-	-	-	-	-	-
	CCTV DATA	-	-	-	-	-	-	-	-
RAILROAD	RR PREEMPTION (12C#14)	-	-	-	-	-	-	-	-
	CONDUIT SIZE (INCHES)	2-3	2	2	2	2	2	2	2
	CONDUIT FILL (%)	6	20	13	12	8	14	9	8

ALL CONDUCTORS AND CABLES ARE EXISTING UNLESS NOTED OTHERWISE

ALL CONDUITS ARE EXISTING UNLESS NOTED OTHERWISE

( ) - DENOTES NEW

2ND STREET AT TAMALPAIS AVENUE POLE AND EQUIPMENT SCHEDULE										
LOCATION	STANDARD TYPE	SIGNAL MAST ARM	LUMINAIRE MAST ARM	LED LUMINAIRE WATTAGE	VEHICLE SIGNAL MOUNTING		PED SIGNAL MOUNTING	STREET NAME SIGN (S.N.S.) LEGEND	*SPECIAL REQUIREMENTS	
					MAST ARM	POLE				
(A)	17-2-100	20'	12'	100	MAS	SV-1-T	-	"FRANCISCO BOULEVARD"	FURNISH AND INSTALL R3-2 BLANK-OUT SIGN ON EXISTING SIGNAL POLE	N
(B)	1-A	-	-	-	-	TV-2-T	-	-	FURNISH AND INSTALL R3-1 AND R3-2 BLANK-OUT SIGNS ON EXISTING SIGNAL POLE	N
(C)	17-2-100	20'	12'	100	MAS	SV-2-T	SP-1-T	"2ND STREET"	FURNISH AND INSTALL R3-2 BLANK-OUT SIGN ON EXISTING SIGNAL POLE	N
(D)	1-A	-	-	-	-	TV-1-T	SP-2-T	-		
(E)	17-2-100	15'	12'	100	MAS	SV-1-T	SP-1-T	"2ND STREET"	FURNISH AND INSTALL R3-1 BLANK-OUT SIGN ON EXISTING SIGNAL POLE	N
(F)	17-2-100	20'	12'	100	MAS	SV-1-T	-	-		

\* OTHER REQUIREMENTS ARE COVERED BY NOTES, LEGEND, SPECIAL PROVISIONS AND CALTRANS STANDARD SPECIFICATIONS. FOR TYPE OF STANDARD, VEHICLE AND PEDESTRIAN MOUNTING, SEE CALTRANS STANDARD PLANS.

ALL POLE AND SIGNAL EQUIPMENT IS EXISTING UNLESS NOTED OTHERWISE.

ALL PEDESTRIAN SIGNAL HEADS SHALL BE COUNTDOWN TYPE.

N - DENOTES NEW EQUIPMENT



ISSUED FOR  
CONSTRUCTION  
SEPTEMBER 2018



<b>PROJECT NAME</b> 2ND AND 3RD STREETS AT-GRADE RAILROAD CROSSING IMPROVEMENTS  <b>DRAWING NAME</b> TRAFFIC SIGNAL SCHEDULES - 2ND STREET AT TAMALPAIS AVENUE SAN RAFAEL COUNTY OF MARIN CALIFORNIA	DESIGNED DRAWN CHECKED APPROVED	MFF TSW KGA	REVISION BY DATE	DATE
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OAKLAND, CA, 94612  
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CITY OF SAN RAFAEL  
DEPARTMENT OF PUBLIC WORKS

SCALE: AS NOTED
DATE: SEPTEMBER 2018
CITY PROJECT NO. 11335
SHEET NO. TS-2
DRAWING 4 OF 8

K:\04\159702502 - San Rafael 2nd & 3rd Queue Cutlery - KGA\CA\Sheets\TRAFFIC SIGNAL SCHEDULES 2ND STREET AT TAMALPAIS AVENUE.dwg

AWG OR CABLE	2ND STREET AT HETHERTON STREET CONDUCTOR SCHEDULE																						
	CONDUCTOR DESIGNATION	NUMBER OF CONDUCTORS																					
		9	10	11	12	13	14	15	16	17	18	19	9	10	11	12	13	14	15	16	17	18	19
NO. 14	Ø2	(3)	-	-	-	-	-	(3)	(3)	(3)	(3)	(3)	-	-	-	-	-	-	-	-	-	-	-
	Ø5	3	3	-	3	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	(ØOLA)	3	3	-	3	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ø2P	2	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ø2APS	2	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PEU	-	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(SPARES)	(3)	-	-	-	-	-	-	(3)	(3)	(3)	(3)	(3)	-	-	-	-	-	-	-	-	-	-	
TOTAL NO. 14		16	12	6	6	3	6	(6)	(6)	(6)	(6)	(6)											
NO. 8	SIGNAL COMMON BOND	1	1	1	1	1	1	(1)	(1)	(1)	(1)	(1)											
		1	1	1	1	1	1	(1)	(1)	(1)	(1)	(1)											
TOTAL NO. 8		2	2	2	2	2	2	(2)	(2)	(2)	(2)	(2)											
NO. 10	STREET LIGHTING	-	2	2	2	2	2	(2)	(2)	(2)	(2)	(2)											
		-	2	2	2	2	2	(2)	(2)	(2)	(2)	(2)											
TOTAL NO. 10		-	2	2	2	2	2	(2)	(2)	(2)	(2)	(2)											
DLC	ØOLA DETECTION LOOP CABLE	(5)	-	-	-	-	-	(5)	(5)	(5)	(5)	-											
SMFO	FIBER OPTIC CABLE	1	-	-	-	-	-	1	1	1	-	-											
CCTV	CCTV POWER AND DATA	(1)	-	-	-	-	-	(1)	(1)	(1)	(1)	(1)											
RAILROAD	RR PREEMPTION (12C#14)	(1)	-	-	-	-	-	(1)	(1)	(1)	-	-											
	CONDUIT SIZE (INCHES)	2-3	3	3	3	2	2	3	3	3	(3)	(3)											
	CONDUIT FILL (%)	11	6	4	4	8	9	25	25	25	(10)	(5)											

ALL CONDUCTORS AND CABLES ARE EXISTING UNLESS NOTED OTHERWISE

ALL CONDUITS ARE EXISTING UNLESS NOTED OTHERWISE

( ) - DENOTES NEW

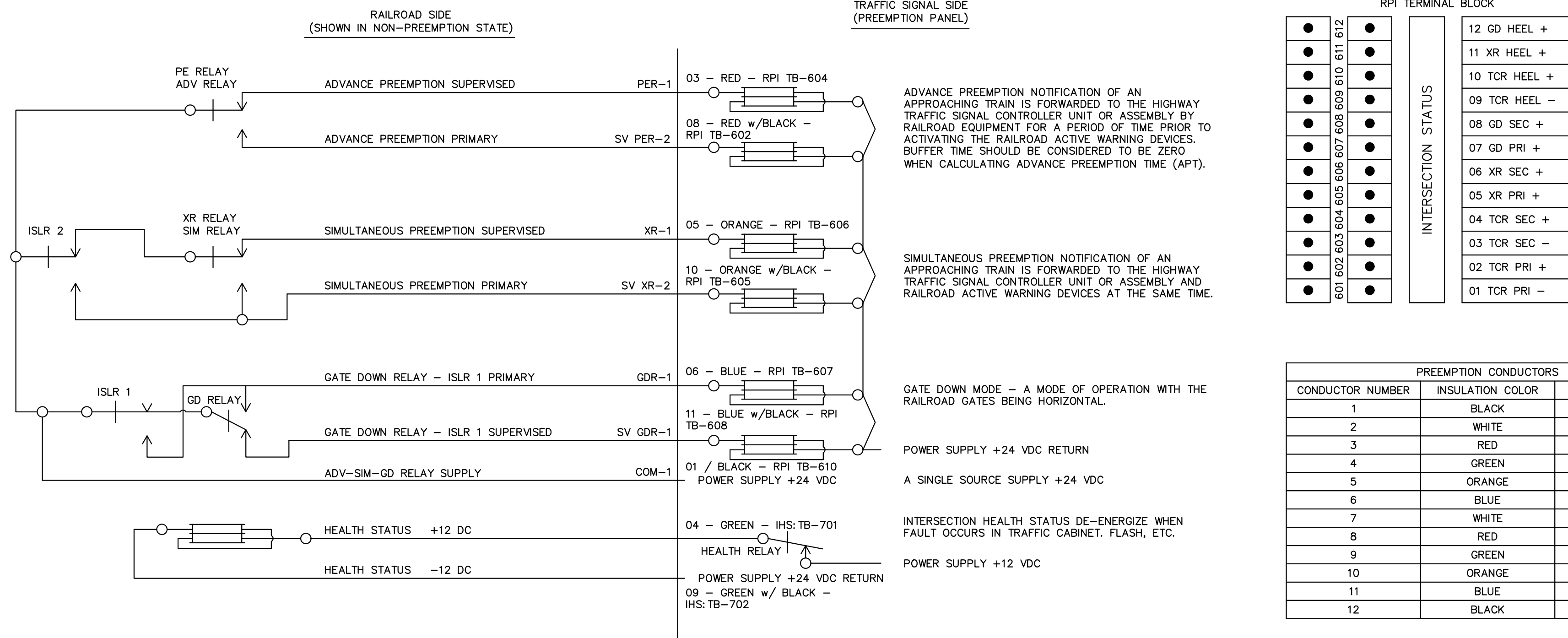
2ND STREET AT HETHERTON STREET POLE AND EQUIPMENT SCHEDULE											
LOCATION	STANDARD			LED LUMINAIRE WATTAGE	VEHICLE SIGNAL MOUNTING		PED SIGNAL MOUNTING	ACCESSIBLE PEDESTRIAN SIGN		STREET NAME SIGN (S.N.S.) LEGEND	*SPECIAL REQUIREMENTS
	TYPE	SIGNAL MAST ARM	LUMINAIRE MAST ARM		MAST ARM	POLE		PHASE (#)	ARROW		
(H)	15TS	-	12'	100	-	-	SP-1-T	Ø2	→	-	EXISTING ACCESSIBLE PEDESTRIAN SIGNAL (APS).
(I)	1-B(4")	-	-	-	-	-	-	Ø2	←	-	EXISTING 1-B CUT OFF POLE FOR APS PER CALTRANS STANDARD PLANS DATED 2010.
(J)	16-2-10	15'	-	-	MAT	SV-1-T	SP-1-T	-	-	-	
(K)	17-2-100	15'	12'	100	MAT	SV-1-T	-	-	-	-	
(L)	1-A	-	-	-	-	TV-1-T	-	-	-	-	
(M)	19-4-100	25'	12'	100	MAS MAS	SV-2-TA	-	-	-	-	
(N)	61-5-100	60'	15'	143	MAT MAT MAT MAT	SV-1-T	-	-	-	-	FURNISH AND INSTALL POLE ON NEW FOUNDATION. FURNISH AND INSTALL PTZ CCTV CAMERA ON SIGNAL POLE.

\* OTHER REQUIREMENTS ARE COVERED BY NOTES, LEGEND, SPECIAL PROVISIONS AND CALTRANS STANDARD SPECIFICATIONS. FOR TYPE OF STANDARD, VEHICLE AND PEDESTRIAN MOUNTING, SEE CALTRANS STANDARD PLANS.

ALL POLE AND SIGNAL EQUIPMENT IS EXISTING UNLESS NOTED OTHERWISE.

ALL PEDESTRIAN SIGNAL HEADS SHALL BE COUNTDOWN TYPE.

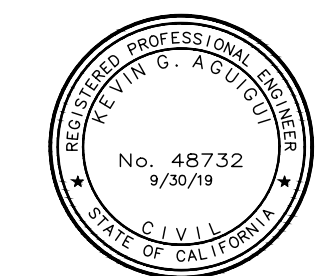
N - DENOTES NEW EQUIPMENT



RAILROAD PREEMPTION CIRCUITS



**ISSUED FOR CONSTRUCTION SEPTEMBER 2018**



DESIGNED	DATE
DRAWN	BY
CHECKED	REVISION
APPROVED	NO.
PROJECT NAME	DATE
DRAWING NAME	DATE

**Kimley»Horn**  
 1300 CLAY STREET, SUITE 325  
 OAKLAND, CA, 94612  
 TEL: (510) 826-0712  
 ©2018

**CITY OF SAN RAFAEL  
 DEPARTMENT OF PUBLIC WORKS**

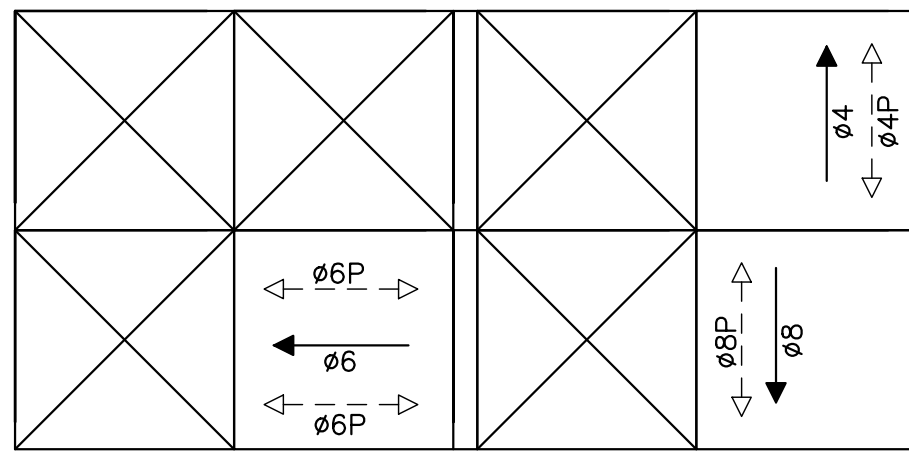
SCALE: AS NOTED
DATE: SEPTEMBER 2018
CITY PROJECT NO. 11335
SHEET NO. TS-3
DRAWING 5 OF 8

SAN RAFAEL, CA 94901 - 1335  
 PROJECT NO. 11335  
 SHEET NO. TS-3  
 DATE: SEPTEMBER 2018  
 DRAWING 5 OF 8



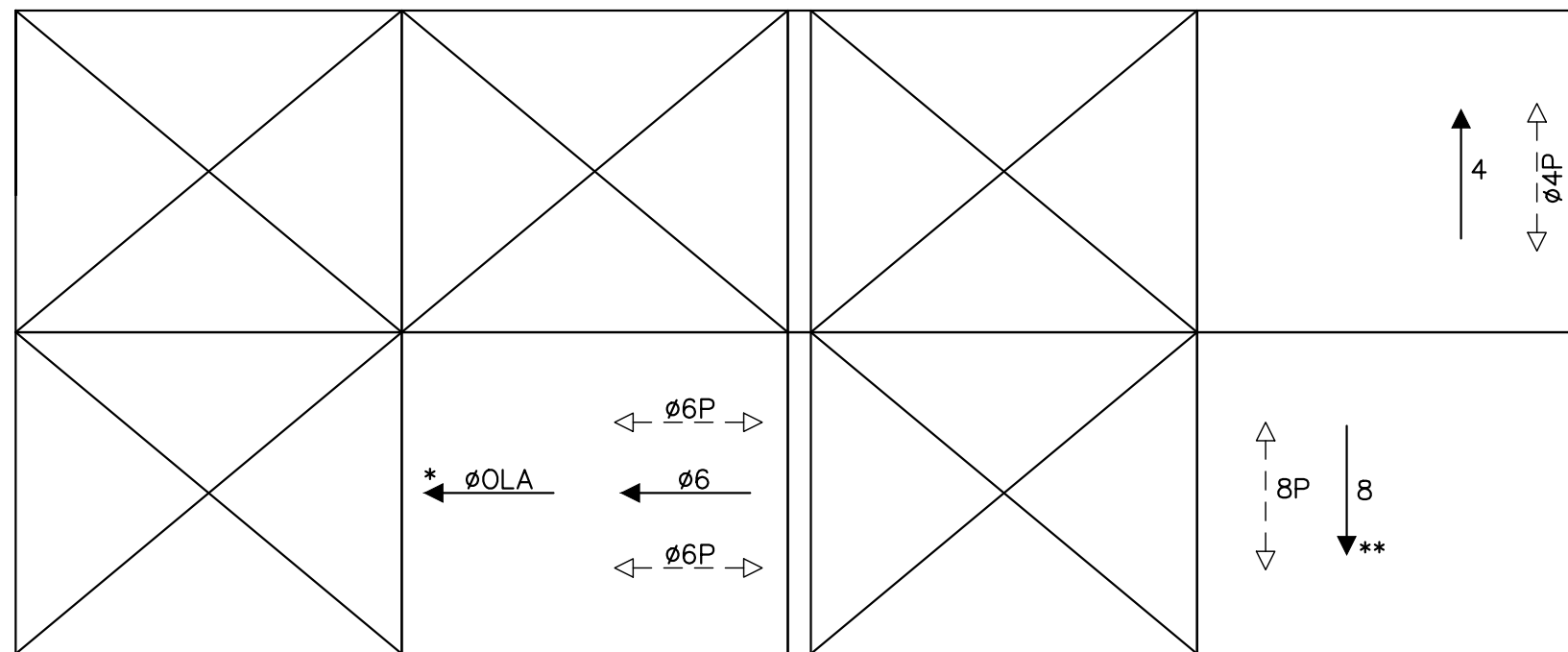
**EXISTING PHASE DIAGRAM**

3RD STREET AT TAMALPAIS AVENUE



**PROPOSED PHASE DIAGRAM**

3RD STREET AT TAMALPAIS AVENUE



\*OLA = 6 + GREEN EXTENSION  
OLA = TRACK CLEARANCE PHASE  
\*\* = LIMITED SERVICE PHASE

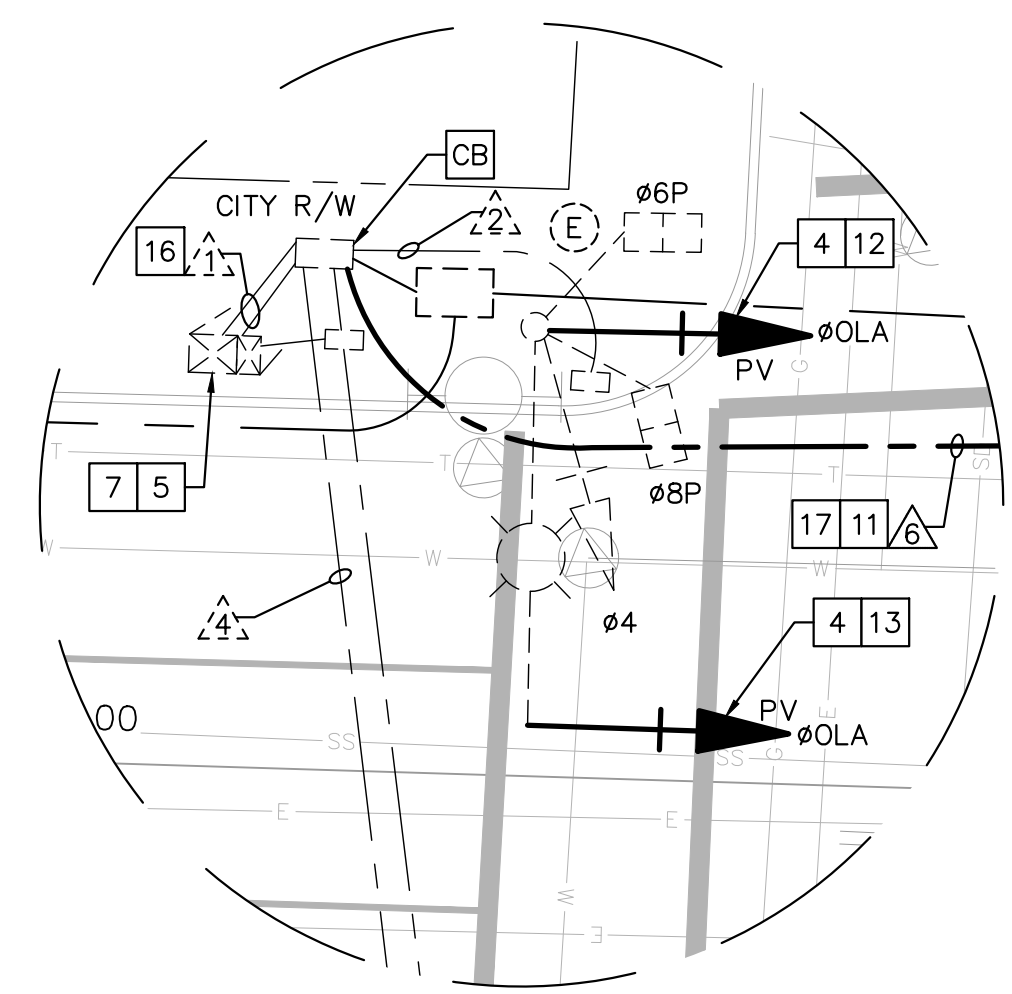
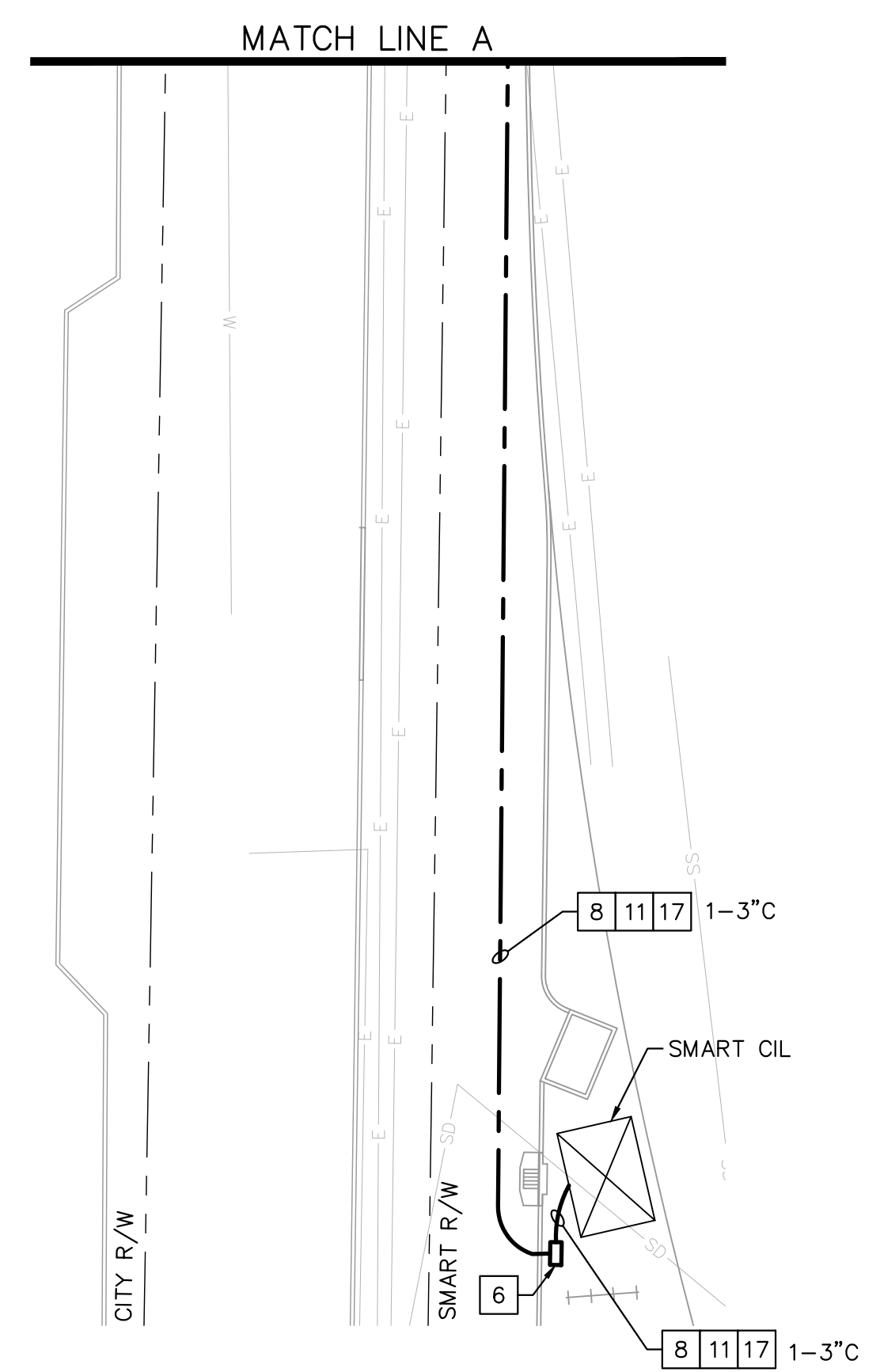
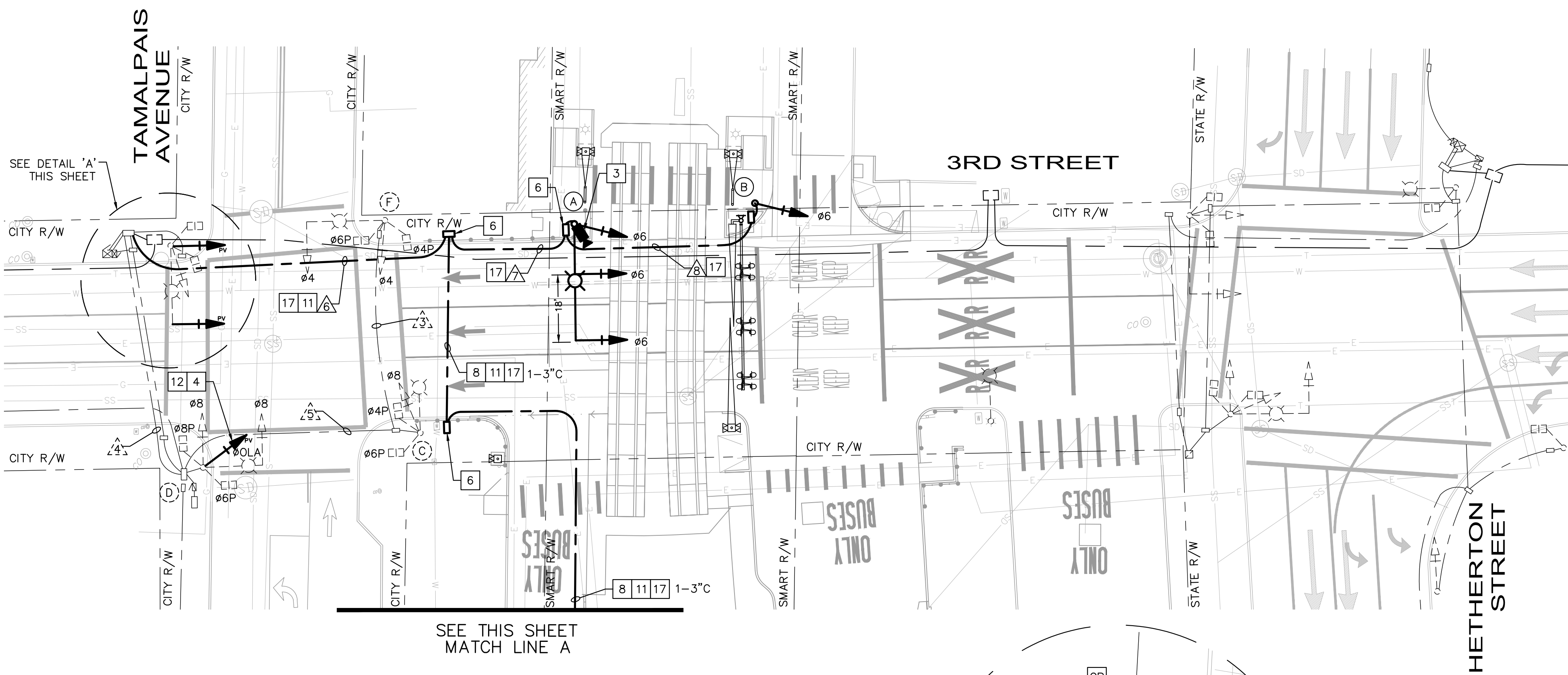
**GENERAL NOTES:**

1. ALL PULL BOXES SHALL BE No. 6 UNLESS NOTED OTHERWISE.
2. STRIPING IMPROVEMENTS PART OF SEPARATE PROJECT SHOWN HEREON AS REFERENCE ONLY.

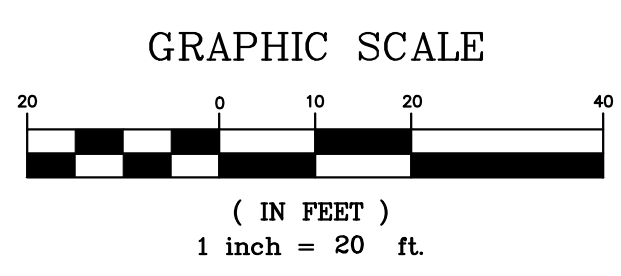
**CONSTRUCTION NOTES:**

3. FURNISH AND INSTALL PTZ CCTV CAMERA ON SIGNAL POLE. SEE DETAIL SHEET CD-1 FOR MOUNTING DETAILS.
4. REASSIGN EXISTING SIGNAL HEAD TO OVERLAP A.
5. INSTALL CITY FURNISHED RAILROAD PREEMPTION PANEL AND HEALTH CIRCUIT PANEL IN EXISTING CABINET.
6. FURNISH AND INSTALL PULL BOX PER CALTRANS REVISED STANDARD PLAN RSP ES-8A.
7. INSTALL CITY FURNISHED POWER SUPPLY IN EXISTING CONTROLLER CABINET FOR PREEMPTION PURPOSES.
8. FURNISH AND INSTALL PVC SCHEDULE 80 CONDUIT. QUANTITY AND SIZE SHOWN ON PLANS.
11. FURNISH AND INSTALL 12#14 AWG RAILROAD PREEMPTION CABLE IN NEW CONDUIT. CONTRACTOR SHALL COORDINATE WITH SMART AND THE CITY FOR RAILROAD PREEMPTION CONNECTION.
12. REMOVE AND SALVAGE EXISTING SIGNAL HEAD. FURNISH AND INSTALL NEW 12" SIGNAL HEAD WITH PROGRAMMED VISIBILITY. MODIFY MOUNTING BRACKETS AS NEEDED.
13. REMOVE AND RELOCATE EXISTING SIGNAL HEAD TO NEW POLE A MAST ARM. FURNISH AND INSTALL NEW 12" SIGNAL HEAD WITH PROGRAMMED VISIBILITY.
16. FURNISH AND INSTALL 12#14 AWG RAILROAD PREEMPTION CABLE IN EXISTING CONDUIT. CONTRACTOR SHALL COORDINATE WITH SMART AND THE CITY FOR RAILROAD PREEMPTION CONNECTION.
17. FURNISH AND INSTALL 3-CELL FABRIC INNERDUCT WITH PULL ROPES IN NEW CONDUIT.

DESIGNED	MFF	DATE
DRAWN	TSW	
CHECKED	KGA	
APPROVED		
PROJECT NAME		DATE
2ND AND 3RD STREETS AT-GRADE RAILROAD CROSSING IMPROVEMENTS		
DRAWING NAME		DATE
3RD STREET RAILROAD CROSSING TRAFFIC SIGNAL PLAN -		
SAN RAFAEL COUNTY OF MARIN CALIFORNIA		



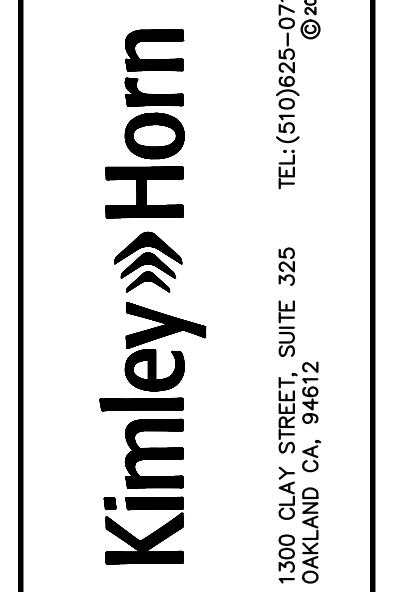
**DETAIL 'A'**  
SCALE: 1" = 10'



THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY



**ISSUED FOR CONSTRUCTION SEPTEMBER 2018**



**CITY OF SAN RAFAEL**  
**DEPARTMENT OF PUBLIC WORKS**

SCALE:	AS NOTED
DATE:	SEPTEMBER 2018
CITY PROJECT NO.:	11335
SHEET NO.:	TS-4
DRAWING	6 OF 8

CA: 09/18/18 - 11:56AM - 11335 - 3RD STREET RAILROAD CROSSING IMPROVEMENTS - San Rafael 2nd & 3rd Queue Cutters - KGA\CAO\Sheets\6 TRAFFIC SIGNAL PLAN - 3RD STREET RAILROAD CROSSING.DWG



AWG OR CABLE	3RD STREET AT TAMALPAIS AVENUE CONDUCTOR SCHEDULE								
	CONDUCTOR DESIGNATION	NUMBER OF CONDUCTORS							
		1	2	3	4	5	6	7	8
NO. 14	#4	6	3	3	3	3	3	3	3
	#6	(3)	-	-	-	-	(3)	(3)	(3)
	#8	3	-	-	3	3	-	-	-
	(#OLA)	6	3	-	3	-	-	-	-
	#4P	2	-	2	2	2	-	-	-
	#6P	4	2	2	2	2	-	-	-
	#8P	4	2	-	2	-	-	-	-
	PEU	-	3	-	-	-	-	-	-
	(SPARES)	(3)	-	-	-	-	(3)	(3)	(3)
	TOTAL NO. 14	31	13	7	15	10	(6)	(6)	(6)
NO. 8	SIGNAL COMMON	1	1	1	1	1	(1)	(1)	(1)
	BOND	1	1	1	1	1	(1)	(1)	(1)
	TOTAL NO. 8	2	2	2	2	2	(2)	(2)	(2)
NO. 10	STREET LIGHTING	-	2	2	2	2	(2)	(2)	(2)
	TOTAL NO. 10	-	2	2	2	2	(2)	(2)	(2)
	SMFO	1	-	-	-	-	-	-	-
SIC	SIGNAL INTERCONNECT	2	-	-	2	-	-	-	-
	CCTV	CCTV POWER	(1)	-	-	-	(1)	(1)	-
RAILROAD	CCTV DATA	(1)	-	-	-	-	(1)	(1)	-
	RR PREEMPTION (12C#14)	(1)	-	-	(1)	-	-	-	-
	CONDUIT SIZE (INCHES)	2-3	3	2	3	2	(2-3)	(2-3)	(2-3)
	CONDUIT FILL (%)	14	6	10	17	5	(5)	(3)	(3)

ALL CONDUCTORS AND CABLES ARE EXISTING UNLESS NOTED OTHERWISE

ALL CONDUITS ARE EXISTING UNLESS NOTED OTHERWISE

( ) - DENOTES NEW

3RD STREET AT TAMALPAIS AVENUE POLE AND EQUIPMENT SCHEDULE										
LOCATION	STANDARD			LED LUMINAIRE WATTAGE	VEHICLE SIGNAL MOUNTING		PED SIGNAL MOUNTING	STREET NAME SIGN (S.N.S.) LEGEND	*SPECIAL REQUIREMENTS	
	TYPE	SIGNAL MAST ARM	LUMINAIRE MAST ARM		MAST ARM	POLE				
(A) N	19-3-100	30'	12'	143	MAT	SV-1-T	-	-	FURNISH AND INSTALL POLE ON NEW FOUNDATION. FURNISH AND INSTALL PTZ CCTV CAMERA ON SIGNAL POLE. INSTALL RELOCATED MAT SIGNAL HEAD FROM EXISTING POLE E.	
(B) N	1-A	-	-	-	-	TV-1-T	-	-	FURNISH AND INSTALL POLE ON NEW FOUNDATION.	
(C)	15TS	-	12'	100	-	SV-1-T	SP-2-T	-		
(D)	17-3-100	15'	12'	100	MAT	SV-2-T	SP-1-T	THIRD ST	REMOVE AND SALVAGE EXISTING SIGNAL HEAD. FURNISH AND INSTALL NEW 12" SIGNAL HEAD WITH PROGRAMMED VISIBILITY ON EXISTING MOUNTING.	
(E)	17-3-100	20'	12'	100	MAT (PV)	SV-2-T	SP-2-T	TAMALPAIS AVE TO FRANCISCO BL. W.	REMOVE AND SALVAGE EXISTING SIGNAL HEAD. FURNISH AND INSTALL NEW 12" SIGNAL HEAD WITH PROGRAMMED VISIBILITY ON EXISTING MOUNTING.	
(F)	17-3-100	20'	12'	100	MAT	SV-1-T	SP-2-T	THIRD ST		

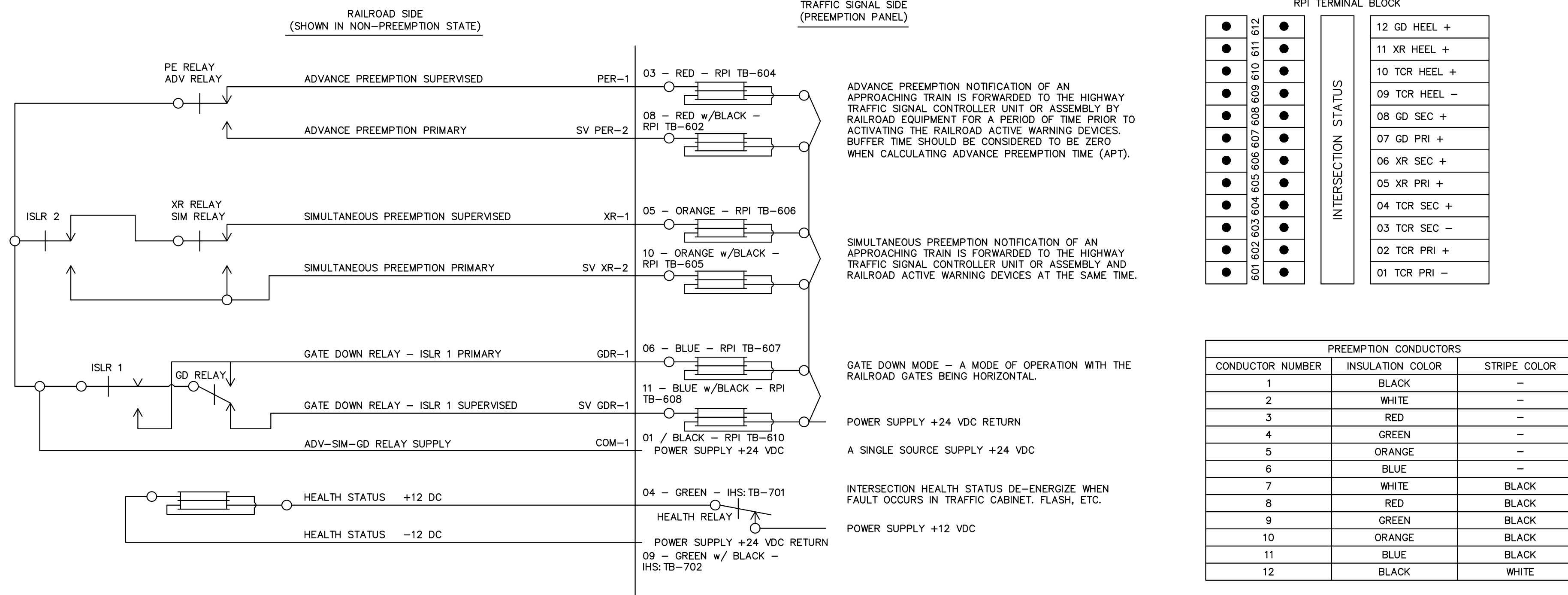
\* OTHER REQUIREMENTS ARE COVERED BY NOTES, LEGEND, SPECIAL PROVISIONS AND CALTRANS STANDARD SPECIFICATIONS. FOR TYPE OF STANDARD, VEHICLE AND PEDESTRIAN MOUNTING, SEE CALTRANS STANDARD PLANS.

ALL POLE AND SIGNAL EQUIPMENT IS EXISTING UNLESS NOTED OTHERWISE.

ALL PEDESTRIAN SIGNAL HEADS SHALL BE COUNTDOWN TYPE.

N - DENOTES NEW EQUIPMENT

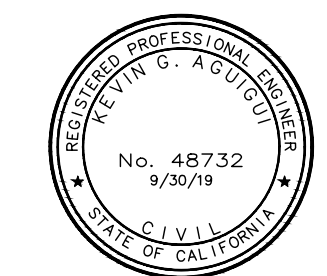
R - DENOTES RELOCATED EQUIPMENT



RAILROAD PREEMPTION CIRCUITS



**ISSUED FOR CONSTRUCTION SEPTEMBER 2018**



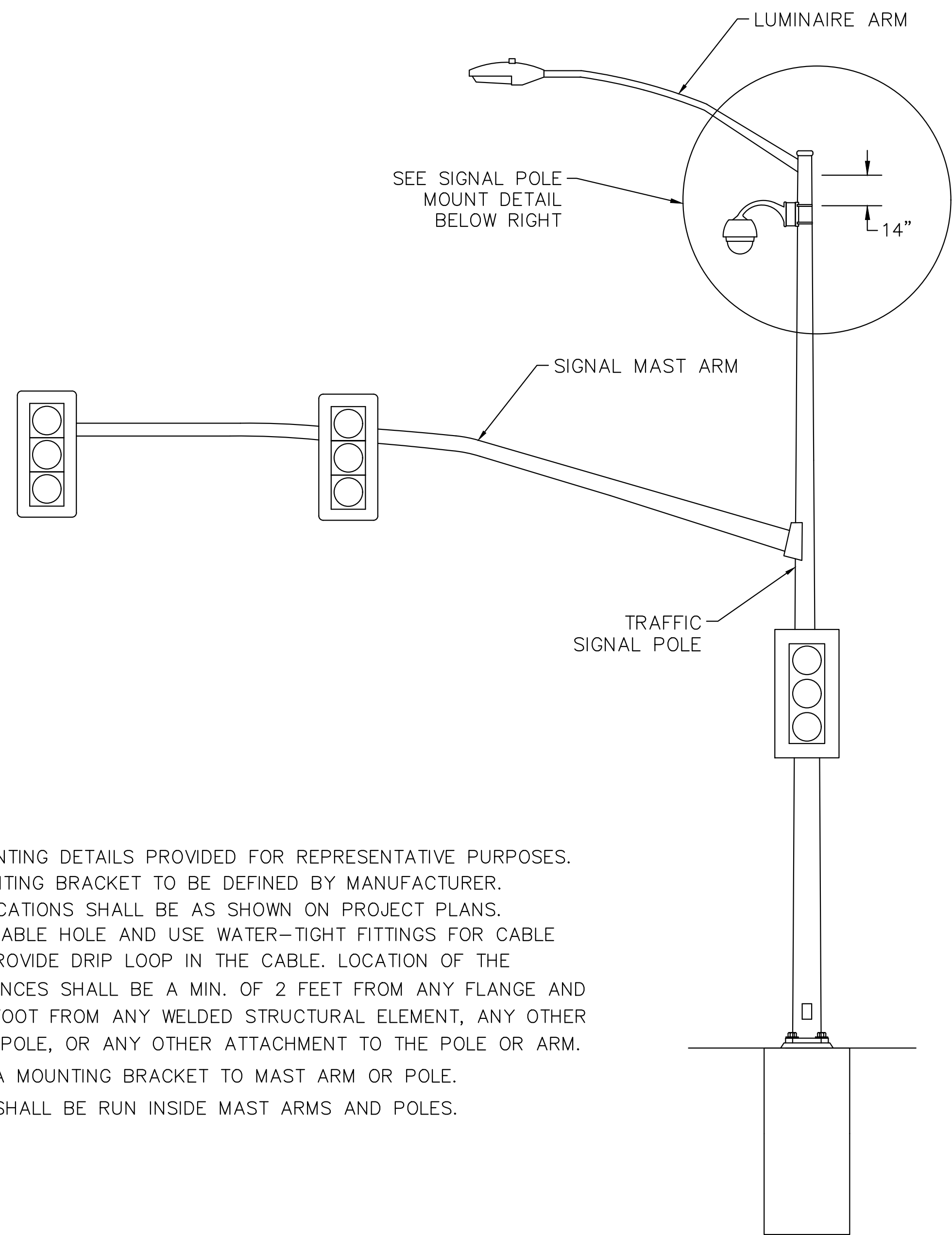
PROJECT NAME	2ND AND 3RD STREETS AT-GRADE RAILROAD CROSSING IMPROVEMENTS			
DRAWING NAME	TRAFFIC SIGNAL SCHEDULES - 3RD STREET AT TAMALPAIS AVENUE			
DESIGNED	MFF	TSW	KGA	DATE
DRAWN				
CHECKED				
APPROVED				
NO.				DATE
REVISION				
BY				
DATE				

**Kimley»Horn**  
 1300 CLAY STREET, SUITE 325  
 OAKLAND, CA, 94612  
 TEL: (510) 826-0712  
 @2018

CITY OF SAN RAFAEL  
 DEPARTMENT OF PUBLIC WORKS

SCALE:	AS NOTED
DATE:	SEPTEMBER 2018
CITY PROJECT NO.:	11335
SHEET NO.:	TS-5
DRAWING	7 OF 8

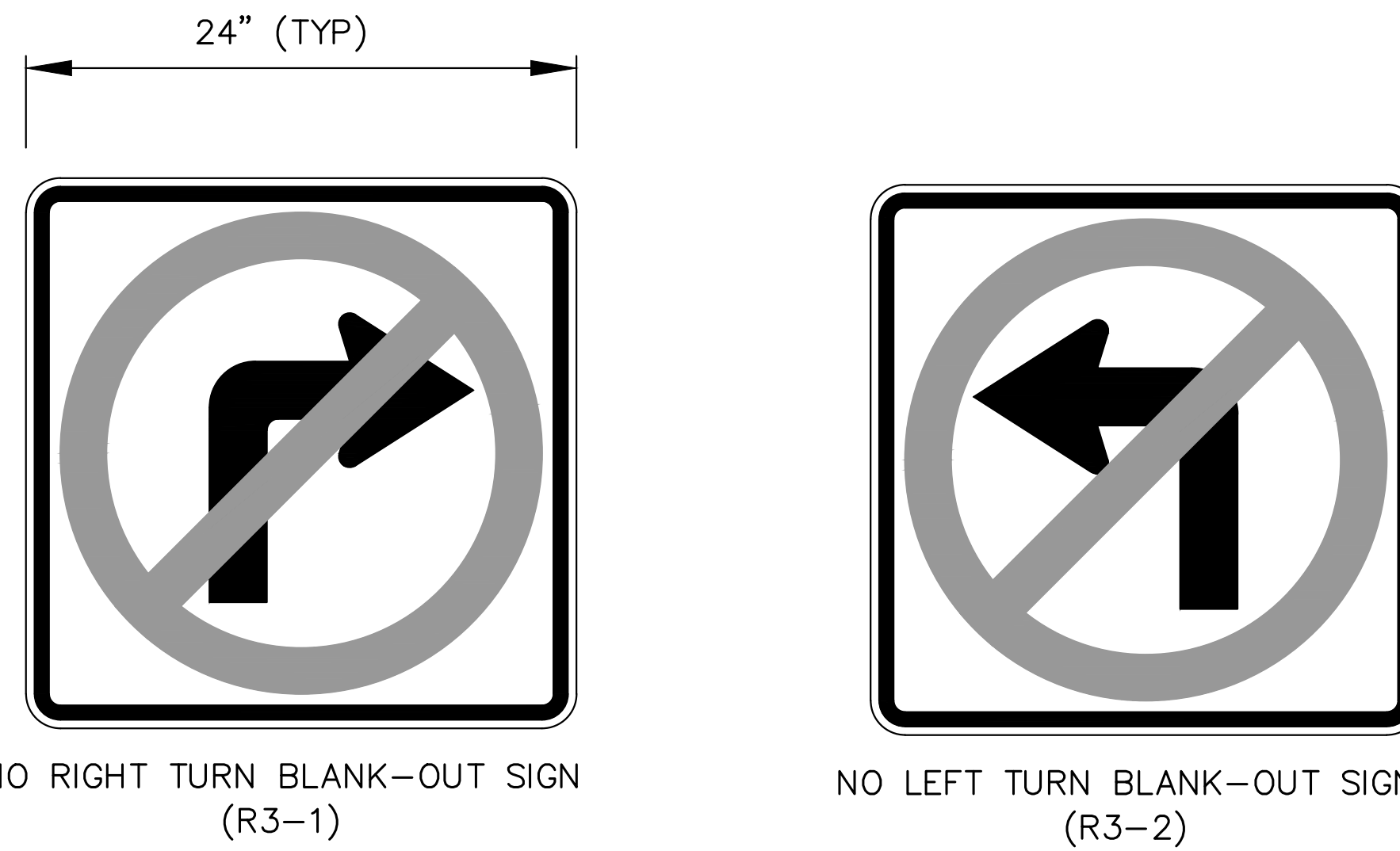
CA: 1-800-227-2600  
 CALL TWO WORKING DAYS BEFORE YOU DIG  
 UNDERGROUND SERVICE LIST



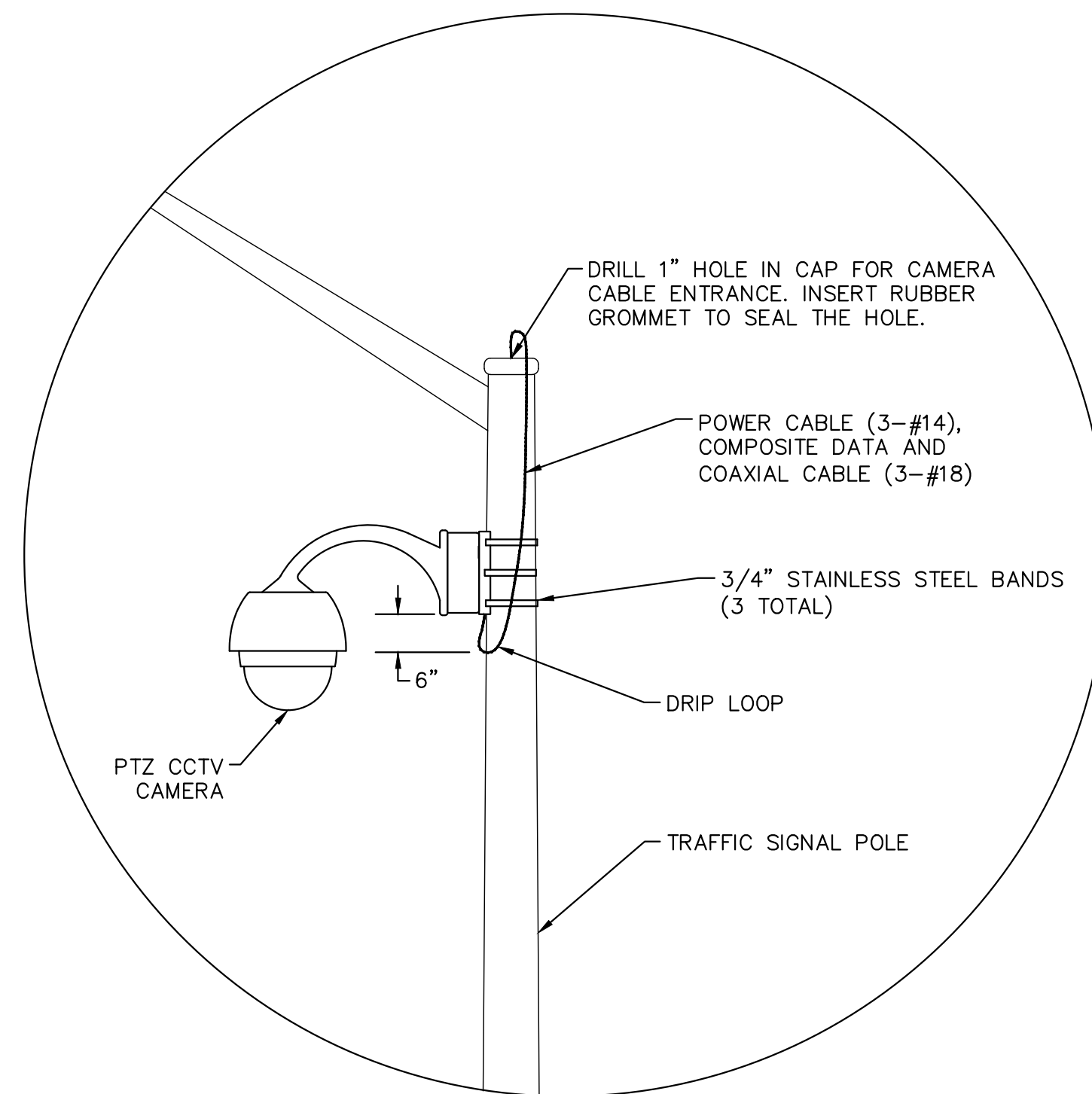
**SIGNAL POLE CAMERA MOUNTING**  
NTS

NOTES:

1. CAMERA MOUNTING DETAILS PROVIDED FOR REPRESENTATIVE PURPOSES. ACTUAL MOUNTING BRACKET TO BE DEFINED BY MANUFACTURER.
2. MOUNTING LOCATIONS SHALL BE AS SHOWN ON PROJECT PLANS.
3. FIELD DRILL CABLE HOLE AND USE WATER-TIGHT FITTINGS FOR CABLE ENTRANCE. PROVIDE DRIP LOOP IN THE CABLE. LOCATION OF THE WIRING ENTRANCES SHALL BE A MIN. OF 2 FEET FROM ANY FLANGE AND AT LEAST 1 FOOT FROM ANY WELDED STRUCTURAL ELEMENT, ANY OTHER HOLE IN THE POLE, OR ANY OTHER ATTACHMENT TO THE POLE OR ARM.
4. BAND CAMERA MOUNTING BRACKET TO MAST ARM OR POLE.
5. ALL CABLES SHALL BE RUN INSIDE MAST ARMS AND POLES.



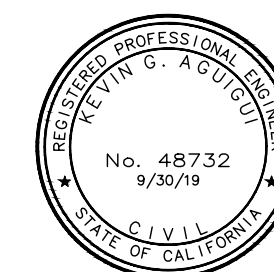
**BLANK-OUT SIGNS**  
NTS



**POLE MOUNT - PTZ CCTV CAMERA**  
NTS



**ISSUED FOR CONSTRUCTION SEPTEMBER 2018**



PROJECT NAME <b>2ND AND 3RD STREETS AT-GRADE RAILROAD CROSSING IMPROVEMENTS</b>	DESIGNED MFF	NO.	REVISION	BY	DATE
DRAWING NAME <b>CONSTRUCTION DETAILS</b>	DRAWN TSW		CHECKED KGA		
SAN RAFAEL COUNTY OF MARIN CALIFORNIA	APPROVED				DATE

**Kimley»Horn**  
1300 CLAY STREET, SUITE 325  
OAKLAND, CA, 94612  
TEL: (510) 825-0712  
©2018

**CITY OF SAN RAFAEL  
DEPARTMENT OF PUBLIC WORKS**

SCALE: AS NOTED  
DATE: SEPTEMBER 2018  
CITY PROJECT NO. 11335  
SHEET NO. **CD-1**  
DRAWING 8 OF 8



**SAN RAFAEL CITY COUNCIL AGENDA REPORT**

**Department: Public Works**

**Prepared by: Bill Guerin,  
Director of Public Works**

**City Manager Approval:** \_\_\_\_\_

**TOPIC: SURPLUS PROPERTY CONVEYANCE**

File No.: 07.02.41

**SUBJECT: A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SAN RAFAEL APPROVING THE CONVEYANCE OF SURPLUS CITY PROPERTY TO THE STATE OF CALIFORNIA IN CONNECTION WITH THE WIDENING OF THE NORTHBOUND U.S. 101/EASTBOUND I-580 FREEWAY OFF-RAMP**

**RECOMMENDATION:** Adopt a resolution authorizing the conveyance of surplus City property to the State of California in connection with the widening of the northbound U.S. 101/Eastbound I-580 freeway off-ramp.

**BACKGROUND:** The State of California Department of Transportation (Caltrans) is undertaking a project to widen the freeway off-ramp at the intersection of Northbound U.S. Highway 101 and Eastbound Interstate 580 through Bellam Boulevard in San Rafael. The project includes the installation of an additional lane at Bellam Boulevard and extends the new lane onto the 101 off-ramp area with the intent to provide more capacity on the off-ramp. Vehicles traveling from Highway 101 to Eastbound I-580 back up on this ramp during commute periods.

In 1981, the adjacent property known as Marin Square processed a lot merger which created a small remnant of property located between the Marin Square site and the 101 Northbound off-ramp to Bellam Boulevard. This remnant parcel was then deeded to the City of San Rafael.

**ANALYSIS:** In connection with its freeway off-ramp widening project, Caltrans is requesting that the City of San Rafael donate this small property to the State of California in order to provide enough property to construct an additional lane on the off-ramp.

The subject property, which has no value to the City, is approximately 3000-square foot

**FOR CITY CLERK ONLY**

**File No.:** \_\_\_\_\_

**Council Meeting:** \_\_\_\_\_

**Disposition:** \_\_\_\_\_

in size, isolated, and is a very narrow section of land located between the Caltrans right-of-way and private property. Caltrans is requesting that the City of San Rafael donate the property to the State by execution of a Quitclaim Deed (Attachment 2) and a Caltrans "Acknowledgement for Donations" form (Attachment 3). Exhibits B and B-1 to the Acknowledgement for Donations form show the location and dimensions of the subject property.

Article III, section 5 of the City's Charter provides that the City has the right and power to dispose of public property for the public benefit. Provisions of the California Government Code requiring the City to offer surplus property for sale to various educational, recreational, housing or other agencies do not apply to this Property because of its small size. The off-ramp widening project will be of great benefit to the City and the public by enhancing the flow of freeway traffic; therefore, staff recommends that it is in the best interests of the City to donate the property to Caltrans as requested.

The attached resolution authorizes the Mayor to execute the Quitclaim Deed, the Acknowledgement for Donations form, and all other required documents.

**FISCAL IMPACT:** There is no fiscal impact associated with this item.

**RECOMMENDED ACTION:** Adopt a resolution authorizing the conveyance of surplus City property to the state of California in connection with the widening of the northbound U.S. 101/Eastbound I-580 freeway off-ramp.

**ATTACHMENTS:**

1. Resolution
2. Exhibit A to Resolution: Quitclaim Deed
3. Caltrans form of Acknowledgement for Donations



**RESOLUTION NO. \_\_\_\_\_**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF  
SAN RAFAEL APPROVING THE CONVEYANCE OF SURPLUS  
CITY PROPERTY TO THE STATE OF CALIFORNIA IN  
CONNECTION WITH THE WIDENING OF THE NORTHBOUND  
U.S. 101/EASTBOUND I-580 FREEWAY OFF-RAMP**

**WHEREAS**, the State of California, through its Department of Transportation (hereafter “Caltrans”) is undertaking a project to widen the freeway off-ramp at the intersection of Northbound U.S. Highway 101 and Eastbound Interstate Highway 580 in San Rafael (the “offramp widening”); and

**WHEREAS**, the City of San Rafael owns a parcel of unimproved real property directly adjacent to the Caltrans right-of-way where the freeway will be widened (the “Property”), which Property is more particularly described in the “Quitclaim Deed” attached hereto as Exhibit 1; and

**WHEREAS**, Caltrans has requested that the City execute the Quitclaim Deed to convey the City’s interest in the Property to Caltrans, to become part of the off-ramp widening; and

**WHEREAS**, the information presented by City staff indicates, and the City Council finds, that the Property is approximately 3,000 square feet in size and is not needed by the City for municipal purposes; and

**WHEREAS**, Article III, section 5 of the Charter of the City of San Rafael provides that the City has the right and power to dispose of public property for the public benefit; and

**WHEREAS**, the City Council finds that the off-ramp widening project will benefit the public health, safety and welfare of the residents of San Rafael and Marin County by enhancing the flow of freeway traffic, and that it is in the best interests of the City to donate the Property to Caltrans without payment of monetary compensation; and

**WHEREAS**, pursuant to Government Code sections 54221-54222.3, due to its small size, the Property is considered to be “exempt surplus property” and may be conveyed by the City without complying with the requirement that it be offered for sale or lease to housing, parks and recreation, school, or other qualified agencies prior to disposition by the City;

**NOW THEREFORE**, be it resolved by the City Council as follows:

1. The Mayor is authorized to execute the Quitclaim Deed in Exhibit 1, Caltrans’ form of “Acknowledgement for Donations”, and all other documents required to effectuate the conveyance of the Property to Caltrans.
2. The City Council waives any claim for monetary compensation for donation of the Property to Caltrans.

I, LINDSAY LARA, City Clerk of the City of San Rafael, hereby certify that this Resolution was duly and regularly introduced and adopted at a regular meeting of said City Council held on the 3<sup>rd</sup> day of December 2018 by the following vote, to wit:

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

---

LINDSAY LARA, City Clerk



**RECORDING REQUESTED BY**  
STATE OF CALIFORNIA

-----  
**WHEN RECORDED RETURN TO**  
DEPARTMENT OF TRANSPORTATION  
PO BOX 23440, MS-11A  
OAKLAND, CA 94623-0440  
Attn: Jerome Brunstein

Space above this line for Recorder's Use

## QUITCLAIM DEED

District	County	Route	Postmile	Number
04	MRN	101 580	9.8/9.8 4.4/4.7	63736

The City of San Rafael, a municipal corporation,

hereinafter called GRANTOR, hereby releases and quitclaims to the State of California, Department of Transportation, hereinafter called STATE, all right, title and interest in and to all that real property in City of San Rafael, County of Marin, State of California, described as follows:

See Exhibit A, attached.

Transfer Tax Not Applicable: R & T Code 11922

STATE BUSINESS: Free

This is to certify that this document is presented for recordation by the State of California under Government Code 27383 and is necessary to complete the chain of title of the State to property acquired by the State of California.

DISTRICT DIRECTOR

BY \_\_\_\_\_

MARK L. WEAVER  
Deputy District Director  
Right of Way and Land Surveys

Number
63736

This quitclaim deed is made for the purposes of a freeway and the undersigned hereby releases and relinquishes to the STATE any and all abutter's rights, including access rights, appurtenant to the remaining property in which the undersigned has some right, title or interest, in and to the freeway.

Dated: \_\_\_\_\_

City of San Rafael

\_\_\_\_\_  
GARY O. PHILLIPS  
Mayor  
\_\_\_\_\_

---

This is to certify that the State of California, acting by and through the Department of Transportation (according to Section 27281 of the Government Code), accepts for public purposes the real property described in this deed and consents to its recordation.

Dated \_\_\_\_\_

LAURIE BERMAN  
Director of Transportation

By \_\_\_\_\_  
MARK L. WEAVER, Attorney in Fact  
Deputy District Director  
Right of Way and Land Surveys

<b>Number</b>
63736

---

**ACKNOWLEDGMENT**

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California }  
County of \_\_\_\_\_ } SS

On \_\_\_\_\_ before me, \_\_\_\_\_ ,  
*Here insert Name and Title of the Officer*

personally appeared \_\_\_\_\_ ,  
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are  
subscribed to the within instrument and acknowledged to me that he/she/they executed the same in  
his/her/their authorized capacity (ies), and that by his/her/their signature(s) on the instrument the person(s),  
or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing  
paragraph is true and correct.

WITNESS my hand and official seal.

Signature \_\_\_\_\_ (Seal)

---

**Parcel 63736**

**EXHIBIT A**

All that certain parcel of land described as Parcel Two in that Grant Deed to the City of San Rafael, recorded March 26, 1981, in Document No. 81-012917, Official Records of the County of Marin, described:


"BEGINNING at the Southwesterly corner of the land described in the Deed to the State of California, recorded August 30, 1957 in Book 1138 of Official Records at page 153, said point also being on the Westerly right of way line of State Highway 17; thence along said right of way line, South 49° 26' 45" East 35.50 feet to the true point of beginning; thence from said point, along said right of way line, South 49° 26' 45" East 114.23 feet and South 43° 55' 17" East 227.88 feet; thence along a tangent curve to the right with a radius of 150 feet, a central angle of 13° 52' 04.6", a distance of 36.306 feet; thence North 47° 14' 17" West 25.91 feet; thence along a tangent curve to the right with a radius of 3059 feet, a central angle of 03° 19', a distance of 177.076 feet; thence North 43° 55' 17" West 174.69 feet, more or less, to the true point of beginning."

Containing an area of 3,020 square feet, more or less.

This conveyance is made for the purposes of a freeway and the grantor hereby releases and relinquishes to grantee any and all abutter's rights of access, appurtenant to grantor's remaining property, in and to said freeway.

Prepared by:

BKF ENGINEERS

  
Ralph H. Thomas, PLS, No. 4760

Dated: 11/21/2018

**ACKNOWLEDGEMENT FOR DONATIONS**

17-EX-8 (6/2002)

(Form #)

Project	Intersection Improvements including signing, striping modification, retaining wall and traffic signal modifications.	File No. <u>04-0Q270</u>
Parcels	Parcel Two of the Grant Deed to the City of San Rafael recorded March 26, 1981 as 81012917 in Marin County as shown on the attached Exhibit A	Federal Project No. <u>N/A</u>
Limits	<u>In Marin County NB US 101 / EB I-580 Off Ramp to Bellam Blvd. in San Rafael.</u>	

The City of San Rafael (City) does hereby acknowledge that City have been fully informed of our rights under Federal law to receive just compensation for the transfer of fee title of our property, Parcel Two on the Grant Deed to the City of San Rafael recorded March 26, 1981 as 81012917 in Marin County as shown on the attached Exhibit A and shown on the map attached hereto as Exhibit B and made a part hereof, and that City have also been informed of our right to have an appraisal made of said property along with an offer of just compensation.

However, City does hereby waive these rights and agree to donate said fee title to the State of California, Department of Transportation (State) for the freeway project for the Transportation Authority of Marin (TAM) sponsored project at NB US 101/EB I-580 Off Ramp at Bellam Blvd. in San Rafael.

It is understood that TAM and the State shall have right of possession and use of the property upon approval of this Acknowledgement For Donations by the City through City Council Resolution authorizing the execution of the Quitclaim Deed to the State of California, Department of Transportation.

This acknowledgement is signed by us freely and without coercion of any kind.

Name Mr. Gary O. Phillips

Title: Mayor – City of San Rafael

Signed \_\_\_\_\_ Date: \_\_\_\_\_

OFFICIAL RECORDS COUNTY OF MARIN

RECORDING REQUESTED BY

AND WHEN RECORDED MAIL TO

Name

Street Address

City & State

RECORDED AT REQUEST OF **81012917**  
*City of San Rafael*  
 1981 MAR 26 AM 8:00  
 OFFICIAL RECORDS  
 MARIN COUNTY CALIFORNIA  
 W. BRUCE SHAFER  
 NO FEE G. C. 6103

MAIL TAX STATEMENTS TO

Name

Street Address

City & State

SPACE ABOVE THIS LINE FOR RECORDER'S USE

Documentary Transfer Tax \$15000—no consideration

*[Signature]*

GRANT DEED

CLTCV481735

SAN RAFAEL REDEVELOPMENT AGENCY, a public body, corporate and politic  
 (GRANTOR - GRANTORS)

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,  
 Do ~~ss~~ Hereby Grant To

CITY OF SAN RAFAEL, a public body, corporate and politic

the real property in the City of San Rafael  
 County of Marin, State of California, described as follows:

SEE LEGAL DESCRIPTION ATTACHED HERETO

APPROVED BY AGENCY  
 RESOLUTION No. 60-18  
 ON APRIL 7 19.80

Dated

STATE OF CALIFORNIA  
 COUNTY OF } ss.

SAN RAFAEL REDEVELOPMENT AGENCY, a public body,  
 corporate & politic

BY: *[Signature]*

On

before me, the undersigned, a Notary Public in and for  
 said County and State, personally appeared

BY:

known to me to be the person(s) whose name(s) is (are)  
 subscribed to the within instrument and acknowledged that  
 executed the same

(Seal)

(Notary signature line)

His name (notary's) shall be typed or legibly printed"  
 (Sec. 8205 Government Code 1959)





OFFICIAL RECORDS COUNTY OF MARIN

81012917

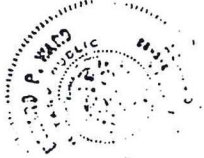
All that certain real property situate in the City of San Rafael, County of Marin, State of California described as follows:

PARCEL ONE:

BEGINNING at the Northeastly terminus of the course "South 47° 14' 18" West 379.23 feet" in the Deed to Joseph Blumenfeld, et al, recorded October 9, 1957 in Book 1145 of Official Records at page 620; thence along said course and along the Northwestly line of Bellam Boulevard, South 47° 14' 18" West 379.23 feet and along a tangent curve to the right with a radius of 355.00 feet, thru an angle of 39° 59' 47", an arc length of 247.81 feet; thence from a tangent that bears North 53° 10' 59" East along a curve to the right with a radius of 1059.00 feet, thru an angle of 07° 06' 10", an arc length of 131.28 feet to a point of reverse curvature; thence along a tangent curve to the left with a radius of 945.00 feet, thru an angle of 13° 02' 51", an arc length of 215.20 feet; thence North 47° 14' 18" East 274.03 feet; thence along a tangent curve to the right with a radius of 1055.00 feet, thru an angle of 04° 37' 54", an arc length of 85.28 feet to the general Southwestly line of the existing state highway, Road 04-MRN-17; thence along the last line and along the Northwestly line of Bellam Boulevard from a tangent that bears South 08° 09' 46" West along a curve to the right with a radius of 150.00 feet, thru an angle of 39° 04' 32", an arc length of 102.30 feet to the point of beginning.

PARCEL TWO:

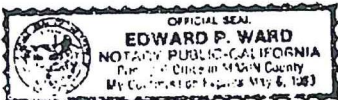
BEGINNING at the Southwestly corner of the land described in the Deed to the State of California, recorded August 30, 1957 in Book 1138 of Official Records at page 153, said point also being on the Westly right of way line of State Highway 17; thence along said right of way line, South 49° 26' 45" East 35.50 feet to the true point of beginning; thence from said point, along said right of way line, South 49° 26' 45" East 114.23 feet and South 43° 55' 17" East 227.88 feet; thence along a tangent curve to the right with a radius of 150 feet, a central angle of 13° 52' 04.6", a distance of 36.306 feet; thence North 47° 14' 17" West 25.91 feet; thence along a tangent curve to the right with a radius of 3059 feet, a central angle of 03° 19', a distance of 177.076 feet; thence North 43° 55' 17" West 174.69 feet, more or less, to the true point of beginning.



STATE OF CALIFORNIA )  
COUNTY OF MARIN ) ss.

On this 5<sup>th</sup> day of FEBRUARY, 1981, before me, EDWARD P. WARD, a Notary Public in and for the County of Marin, State of California, personally appeared

ROBERT F. BEYER, known to me to be the EXECUTIVE DIRECTOR of the SAN RAFAEL REDEVELOPMENT AGENCY, and known to me to be the person who executed the within instrument on behalf of said agency or political subdivision, and acknowledged to me that such agency or political subdivision executed the same.



Notary Sign name Edward P. Ward  
Notary Print name EDWARD P. WARD  
My commission expires 5/6/83



OFFICIAL RECORDS COUNTY OF MARIN

Recording Requested by:

81012917

When recorded mail to:  
E.P. Ward, Assoc. Director  
San Rafael Redevelop. Agency  
P.O. Box 60  
San Rafael CA 94902

Space above for Recorder's Use

81012917

CERTIFICATE OF ACCEPTANCE OF DEED  
BY A GOVERNMENTAL AGENCY

WHEREAS, California Government Code Section 27281 requires that deeds or grants conveying any interest in, or easement upon, real estate to a political corporation or governmental agency for public purposes shall not be accepted for recordation without the consent of the grantee evidenced by its certificate or resolution of acceptance attached to or printed on the deed or grant; and

WHEREAS, Section 27281 also states that a political corporation or governmental agency, by a general resolution, may authorize an officer or agent to accept and consent to such deeds or grants; and

WHEREAS, the City of San Rafael on April 3, 1978, adopted Resolution 5437 authorizing the Mayor of the City of San Rafael to accept deeds or grants to the City of San Rafael and consent to the recordation thereof.

NOW, THEREFORE, the undersigned, Lawrence E. Mulryan, Mayor of the City of San Rafael, does hereby accept the attached deed or grant dated February 5, 1981, and consents to the recordation thereof.

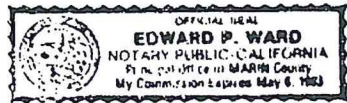
(A.P. 18-051-18819)  
Blumenfeld

*Lawrence E. Mulryan*  
LAWRENCE E. MULRYAN, Mayor  
City of San Rafael

APPROVED BY AGENCY  
RESOLUTION NO. 50-18  
ON APRIL 7 1980

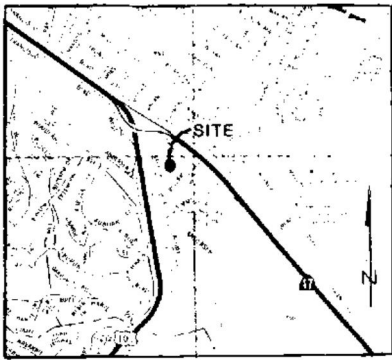
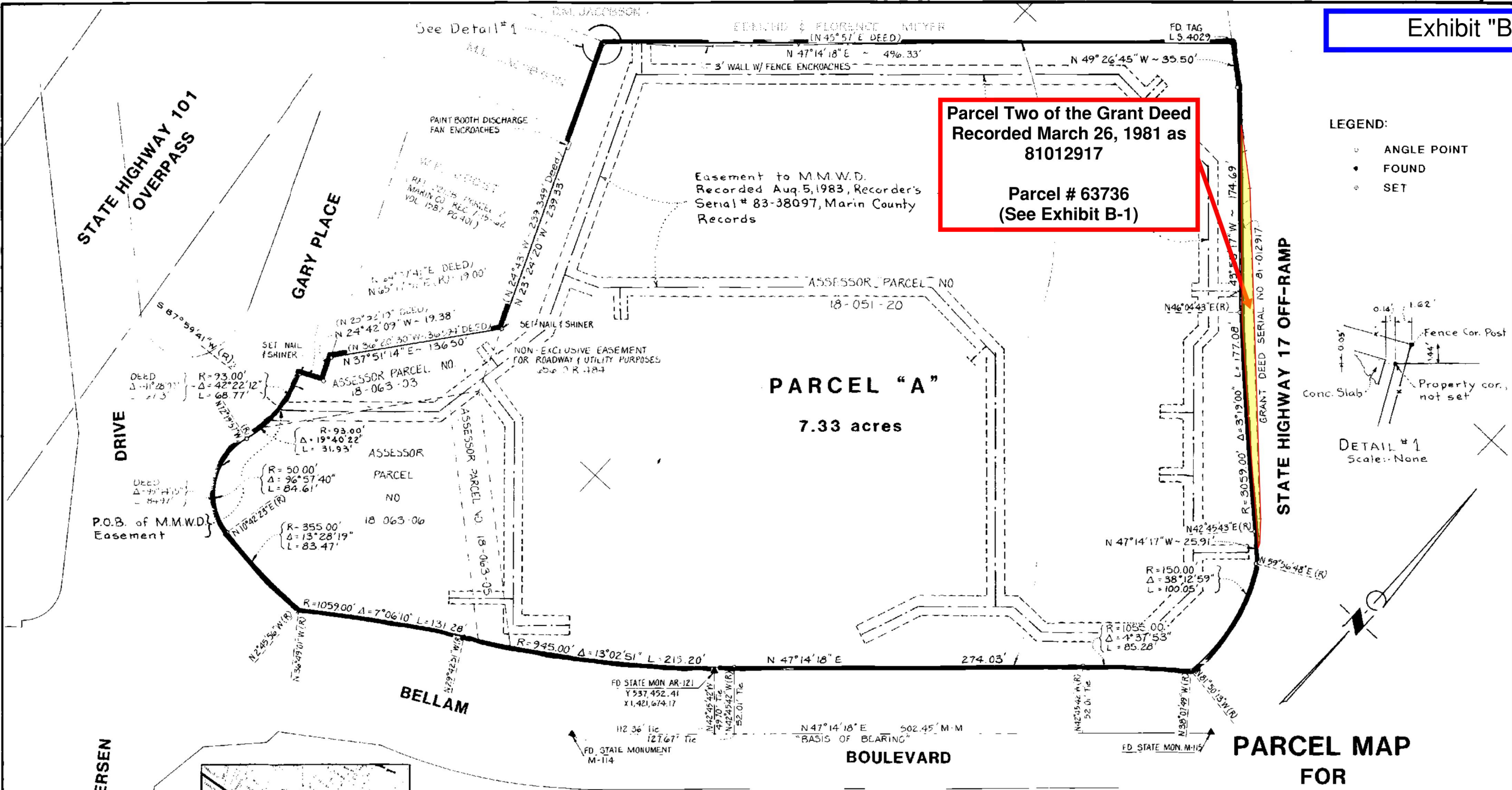
STATE CALIFORNIA )  
COUNTY OF MARIN )

On this 11<sup>th</sup> day of MARCH, in the year 1981,  
before me EDWARD P. WARD, a Notary Public in and for the  
County of Marin, State of California, personally appeared Lawrence E. Mulryan, known to me to be the Mayor of the City of San Rafael, and known to me to be the person who executed the within instrument on behalf of said agency or political subdivision, and acknowledged to me that such agency or political subdivision executed the same.



Notary Sign *Edward P. Ward*  
Name  
Notary Print EDWARD P. WARD  
Name

ORIGINAL



- NOTES**
- Reference: California Land Title Company of Marin, No. 51651 LM. Basis of Bearings: N 47° 14' 18" E taken between California State Monuments M-114 and M-115 in Bellam Boulevard; California Coordinate System, Zone 3 (California State Highway Monument Map S-227.2, Nov., 1980).
  - All distances shown hereon are grid distances. Multiply grid distances by 1.0000643 to obtain ground distances.
  - This Parcel Map has been prepared according to Section 66499.20 1/2 of the Subdivision Map Act to merge the following Assessor Parcel Numbers: 18-051-20, 18-063-03, 18-63-05, and 18-063-06. This merger is a requirement of the City of San Rafael.
  - Map Reference: Book 3746 O.R. 483; California State Hwy. Map Book No. 5, Page 5, Marin Records; California State Highway Right-of-Way Maps R 22.10, R 70A.1, and R 70A.2.
  - Property has no right of ingress or egress to adjoining State Highway - 1138 O.R. 153, and 1145 O.R. 620, Marin County Records.

**PARCEL MAP**  
**FOR**  
**MARIN SQUARE**  
**A LOT MERGER**

SAN RAFAEL MARIN COUNTY CALIFORNIA

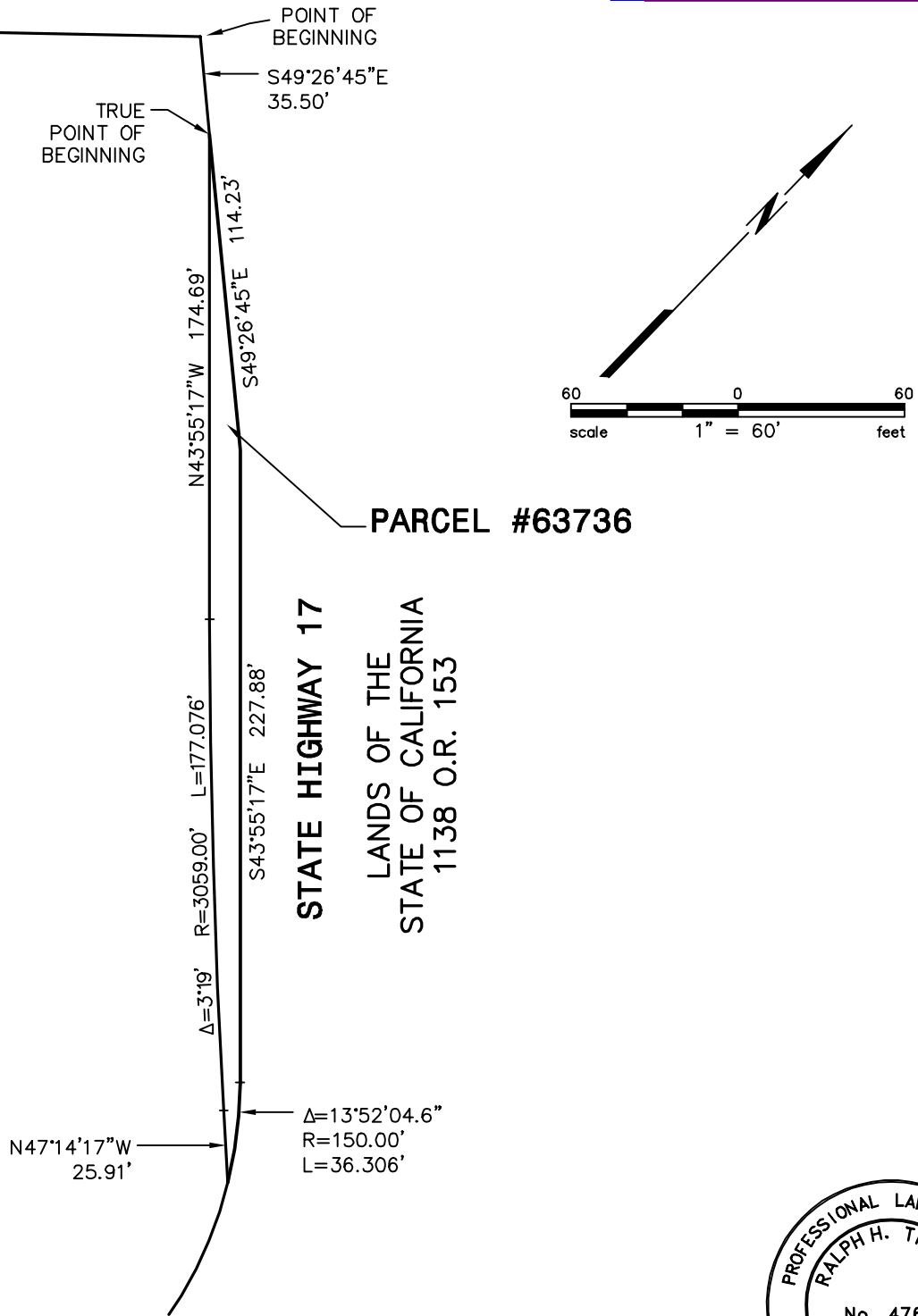
**COLEMAN, SELMI & WRIGHT**  
 ENGINEERS SURVEYORS  
 GREENBRAE CALIFORNIA

SCALE: 1"=50'  
 MAY 1983  
 SHEET 2 OF 2 SHEETS

Can 5361

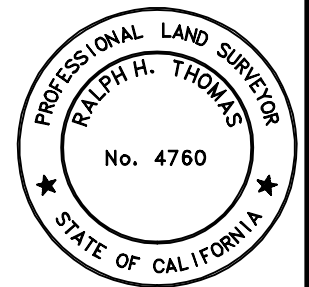
# Exhibit "B-1"

## EXHIBIT 'B'



RALPH H. THOMAS

PLS 4760



711 GRAND AVE, STE. 240  
SAN RAFAEL, CA 94901  
PH: 415-930-7960  
FAX: 415-930-7979

Subject CITY OF SAN RAFAEL TO  
STATE OF CALIFORNIA  
Job No. 20167079  
By AEG Date JUL 2018 Chkd RHT  
SHEET 1 OF 1





**SAN RAFAEL CITY COUNCIL AGENDA REPORT**

**Department: Public Works**

**Prepared by: Bill Guerin,  
Director of Public Works**

**City Manager Approval:** \_\_\_\_\_

File No.: 07.02.40

**TOPIC: NORTH BOUND CENTRAL SAN RAFAEL OFF-RAMP**

**SUBJECT: A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SAN RAFAEL AUTHORIZING THE CITY MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH PARISI/CSW DESIGN GROUP TO DESIGN THE INSTALLATION OF A SECOND RIGHT TURN FROM THE NORTHBOUND 101 OFF-RAMP ONTO SECOND STREET, IN AN AMOUNT NOT TO EXCEED \$121,500**

**RECOMMENDATION:**

Adopt a resolution authorizing the City Manager to execute the professional services agreement with Parisi/CSW Design Group to design the installation of a second right turn lane onto Second street from the Northbound Highway 101 Central San Rafael off-ramp.

**BACKGROUND:** The State of California Department of Transportation (Caltrans) is undertaking a project to replace the concrete bridge which supports the Northbound U.S. Highway 101 Central San Rafael off-ramp that crosses over the San Rafael Creek. The existing concrete bridge was built in the 1950s and is considered by Caltrans to be seismically obsolete. Caltrans anticipates beginning this work in the spring of 2019.

The existing northbound off-ramp delivers vehicles to the Second Street / Irwin Street intersection with three through-lanes and one right-turn lane onto Second Street. City Staff has been working with Caltrans District 4 staff on this bridge replacement project and has requested that the existing sidewalk located on the east side of the bridge be removed in order to allow additional space as vehicles approach Second Street.

On September 11, 2018 the City of San Rafael hired Parisi/CSW Design Group to determine if a secondary right turn pocket could be installed at the off-ramp. Based on the consultant's analysis and discussions with Caltrans, a secondary right turn pocket can be installed at the off-ramp. The additional lane would help to reduce back-ups on the freeway and improve traffic flow onto eastbound Second Street.

**FOR CITY CLERK ONLY**

**File No.:** \_\_\_\_\_

**Council Meeting:** \_\_\_\_\_

**Disposition:** \_\_\_\_\_

**ANALYSIS:** Parisi/CSW Design Group and City staff met with representatives from Caltrans over the last several months. The preliminary plan was reviewed by Caltrans staff and it complies with their standards. The installation of a second right turn onto Second Street would require a small retaining wall, additional grading, and signal modifications.

Caltrans has agreed to incorporate modifications to the crosswalks at this intersection as a part of their base project, which will improve pedestrian safety at this intersection. At this time crosswalks are located on the north and east side of the intersection, which will conflict with the dual right turn from the off-ramp. Relocating these crosswalks to the south and west side of the intersection will eliminate this conflict. Caltrans has agreed to include the installation of the additional turn pocket as a change order to their bridge replacement project.

Staff recommends that the City Council authorize the City Manager to execute a professional services agreement with Parisi/CSW Design Group to prepare the plans and specifications for this project (Attachment 2). If approved, the eventual construction and installation of the improvements to accommodate the new second right turn lane may encroach on the Bio-Marin property located at 700 Irwin Street. A temporary construction easement may be required to install the improvements in this area. Parisi/CSW Design Group has proposed a separate task for this work in their proposal. In addition, Parisi/CSW Design Group’s proposal includes project management and coordination with Caltrans.

**FISCAL IMPACT:** Funding in the amount of \$121,500 is available in the Gas Tax Fund (fund no. 206). The not-to-exceed amount of \$121,500 in the professional services agreement is broken down into three tasks, as follows:

Task 1: Prepare Plans and Specifications	\$73,900
Task 2: Temporary Construction Easement Acquisition	\$13,800
Task 3: Project Management	\$33,800
<b>Total</b>	<b>\$121,500</b>

**RECOMMENDED ACTION:** Adopt a resolution authorizing the City Manager to execute the professional services agreement with Parisi/CSW Design Group to design the installation of a second right turn lane onto Second street from the North Bound Highway 101 Central San Rafael off-ramp.

**ATTACHMENTS:**

1. Resolution
2. Exhibit 1 to Resolution: Professional Services Agreement with Exhibit A, Proposal

**RESOLUTION NO.**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SAN RAFAEL  
AUTHORIZING THE CITY MANAGER TO EXECUTE THE PROFESSIONAL  
SERVICES AGREEMENT WITH PARISI/CSW DESIGN GROUP TO DESIGN THE  
INSTALLATION OF A SECOND RIGHT TURN FROM THE NORTH BOUND 101 OFF-  
RAMP ONTO SECOND STREET, IN AN AMOUNT NOT TO EXCEED \$121,500**

---

**WHEREAS**, the State of California through its Department of Transportation (Caltrans) is undertaking a project to replace the concrete bridge which supports the North Bound Highway 101 Central San Rafael Off-ramp and crosses over the San Rafael Creek; and

**WHEREAS**, the existing North Bound Off-ramp delivers vehicles to the Second Street and Irwin Street Intersection with three through-lanes and one right turn lane onto Eastbound Second Street; and

**WHEREAS**, the City of San Rafael's consultant, Parisi/CSW Design Group, determined that a short secondary right turn pocket could be installed at the off-ramp which will help reduce freeway backups and improve traffic flow onto eastbound Second Street; and

**WHEREAS**, Caltrans has agreed to construct the proposed second right turn lane with their bridge replacement project as long as the City of San Rafael prepares a plan for the work; and

**WHEREAS**, on November 21, 2018, Parisi/CSW Design Group proposed to develop the design, provide project management and assist the city with the acquisition of a temporary construction easement for the project, with a proposed not-to-exceed fee of \$121,500; and

**WHEREAS**, staff has reviewed the Scope of Services from Parisi/CSW Design Group dated November 16, 2018, and has advised the Council that it is within industry standards and acceptable;

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SAN RAFAEL  
RESOLVES** as follows:

1. The City Council does hereby authorize the City Manager to execute a professional services agreement with Parisi/CSW Design Group, Inc. in the form attached hereto as Exhibit 1, subject to final approval as to form by the City Attorney and in an amount not to exceed \$121,500.
2. Funds for the design in the amount of \$121,500 is available in the Gas Tax Fund#206, Project#11357 to support the planned project expenditures.

3. The City Manager is hereby authorized to take any and all such actions and make changes as may be necessary to accomplish the purpose of this resolution.

**I, LINDSAY LARA**, Clerk of the City of San Rafael, hereby certify that the foregoing Resolution was duly and regularly introduced and adopted at a regular meeting of the Council of said City on the 3rd day of December, 2018, by the following vote, to wit:

**AYES: COUNCIL MEMBERS:**

**NOES: COUNCIL MEMBERS:**

**ABSENT: COUNCIL MEMBERS:**

---

**LINDAY LARA, City Clerk**

File No. 07.02.40



**PROFESSIONAL SERVICES AGREEMENT WITH PARISI/CSW DESIGN GROUP TO DESIGN  
THE INSTALLATION OF A SECOND RIGHT TURN FROM THE NORTH BOUND 101  
OFFRAMP ONTO SECOND STREET.**

This Agreement is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2018, by and between the **CITY OF SAN RAFAEL** (hereinafter "**CITY**"), and **PARISI/CSW DESIGN GROUP, A JOINT VENTURE** (hereinafter "**CONSULTANT**").

**RECITALS**

**WHEREAS**, the **CITY** has determined that professional services are required for design of the second right turn lane from the North Bound U.S. 101 Off-ramp onto Second Street; and

**WHEREAS**, the **CONSULTANT** has agreed to render such services.

**AGREEMENT**

**NOW, THEREFORE**, the parties hereby agree as follows:

1. **PROJECT COORDINATION.**

A. **CITY'S Project Manager.** The Director of Public Works is hereby designated the **PROJECT MANAGER** for the **CITY**, and said **PROJECT MANAGER** shall supervise all aspects of the progress and execution of this Agreement.

B. **CONSULTANT'S Project Director.** **CONSULTANT** shall assign a single **PROJECT DIRECTOR** to have overall responsibility for the progress and execution of this Agreement for **CONSULTANT**. David Parisi is hereby designated as the **PROJECT DIRECTOR** for **CONSULTANT**. Should circumstances or conditions subsequent to the execution of this Agreement require a substitute **PROJECT DIRECTOR**, for any reason, the **CONSULTANT** shall notify the **CITY** within ten (10) business days of the substitution.

2. **DUTIES OF CONSULTANT.**

**CONSULTANT** shall perform the duties and/or provide the services described in **CONSULTANT'S** proposal dated November 16, 2018, marked as Exhibit "A," attached hereto, and incorporated herein.

3. **DUTIES OF CITY.**

**CITY** shall compensate **CONSULTANT** as provided in Paragraph 4, and shall provide assistance and site access to **CONSULTANT** as described in Exhibit "A" attached hereto and incorporated herein.

4. **COMPENSATION.**

For the full performance of the services described herein by **CONSULTANT**, **CITY** shall pay **CONSULTANT** on a time and materials basis for services rendered in accordance with the rates shown in

the "Hourly Rates and Billing Policy" included in Exhibit "A" attached and incorporated herein, in an amount not to exceed \$155,300.

Payment will be made monthly upon receipt by PROJECT MANAGER of itemized invoices submitted by CONSULTANT.

5. TERM OF AGREEMENT.

The term of this Agreement shall commence upon the date of execution of this Agreement and end on December 31, 2019 when the work shall have been completed, unless the parties agree to extend this Agreement for another 90 days, as approved in writing by City Manager.

6. TERMINATION.

A. **Discretionary.** Either party may terminate this Agreement without cause upon thirty (30) days written notice mailed or personally delivered to the other party.

B. **Cause.** Either party may terminate this Agreement for cause upon fifteen (15) days written notice mailed or personally delivered to the other party, and the notified party's failure to cure or correct the cause of the termination, to the reasonable satisfaction of the party giving such notice, within such fifteen (15) day time period.

C. **Effect of Termination.** Upon receipt of notice of termination, neither party shall incur additional obligations under any provision of this Agreement without the prior written consent of the other.

D. **Return of Documents.** Upon termination, any and all CITY documents or materials provided to CONSULTANT and any and all of CONSULTANT's documents and materials prepared for or relating to the performance of its duties under this Agreement, shall be delivered to CITY as soon as possible, but not later than thirty (30) days after termination.

7. OWNERSHIP OF DOCUMENTS.

Upon completion of all work under this Agreement, ownership and title to all reports, documents, plans, specifications, and estimates produced as part of this Agreement will automatically be vested in the CITY; and no further agreement will be necessary to transfer ownership to the CITY. CONSULTANT shall furnish to CITY all necessary copies of data needed to complete the review and approval process.

8. INSPECTION AND AUDIT.

Upon reasonable notice, CONSULTANT shall make available to CITY, or its agent, for inspection and audit, all documents and materials maintained by CONSULTANT in connection with its performance of its duties under this Agreement. CONSULTANT shall fully cooperate with CITY or its agent in any such audit or inspection.

9. ASSIGNABILITY.

The parties agree that they shall not assign or transfer any interest in this Agreement nor the performance of any of their respective obligations hereunder, without the prior written consent of the other party, and any attempt to so assign this Agreement or any rights, duties or obligations arising hereunder shall be void and of no effect.

10. INSURANCE.

A. **Scope of Coverage.** During the term of this Agreement, **CONSULTANT** shall maintain, at no expense to **CITY**, the following insurance policies:

1. A commercial general liability insurance policy in the minimum amount of one million dollars (\$1,000,000) per occurrence/two million dollars (\$2,000,000) aggregate, for death, bodily injury, personal injury, or property damage.

2. An automobile liability (owned, non-owned, and hired vehicles) insurance policy in the minimum amount of one million dollars (\$1,000,000) dollars per occurrence.

3. If any licensed professional performs any of the services required to be performed under this Agreement, a professional liability insurance policy in the minimum amount of one million dollars (\$1,000,000) per claim/two million dollars (\$2,000,000) aggregate, to cover any claims arising out of the **CONSULTANT's** performance of services under this Agreement. Where **CONSULTANT** is a professional not required to have a professional license, **CITY** reserves the right to require **CONSULTANT** to provide professional liability insurance pursuant to this section.

4. If it employs any person, **CONSULTANT** shall maintain worker's compensation insurance, as required by the State of California, with statutory limits, and employer's liability insurance with limits of no less than one million dollars (\$1,000,000) per accident for bodily injury or disease. **CONSULTANT's** worker's compensation insurance shall be specifically endorsed to waive any right of subrogation against **CITY**.

B. **Other Insurance Requirements.** The insurance coverage required of the **CONSULTANT** in subparagraph A of this section above shall also meet the following requirements:

1. Except for professional liability or Worker's Compensation insurance, the insurance policies shall be specifically endorsed to include the **CITY**, its officers, agents, employees, and volunteers, as additional insureds under the policies.

2. The additional insured coverage under **CONSULTANT'S** insurance policies shall be "primary and noncontributory" with respect to any insurance or coverage maintained by **CITY** and shall not call upon **CITY's** insurance or self-insurance coverage for any contribution. The "primary and noncontributory" coverage in **CONSULTANT'S** policies shall be at least as broad as ISO form CG20 01 04 13.

3. Except for professional liability insurance or worker's compensation insurance, the insurance policies shall include, in their text or by endorsement, coverage for contractual liability and personal injury.

4. By execution of this Agreement, **CONSULTANT** hereby grants to **CITY** a waiver of any right to subrogation which any insurer of **CONSULTANT** may acquire against **CITY** by virtue of the payment of any loss under such insurance. **CONSULTANT** agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation, but this provision applies regardless of whether or not **CITY** has received a waiver of subrogation endorsement from the insurer.

5. If the insurance is written on a Claims Made Form, then, following termination of this Agreement, said insurance coverage shall survive for a period of not less than five years.

6. The insurance policies shall provide for a retroactive date of placement coinciding with the effective date of this Agreement.

7. The limits of insurance required in this Agreement may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and noncontributory basis for the benefit of **CITY** (if agreed to in a written contract or agreement) before **CITY'S** own insurance or self-insurance shall be called upon to protect it as a named insured.

8. It shall be a requirement under this Agreement that any available insurance proceeds broader than or in excess of the specified minimum insurance coverage requirements and/or limits shall be available to **CITY** or any other additional insured party. Furthermore, the requirements for coverage and limits shall be: (1) the minimum coverage and limits specified in this Agreement; or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named insured; whichever is greater. No representation is made that the minimum Insurance requirements of this agreement are sufficient to cover the obligations of the **CONSULTANT** under this agreement.

C. **Deductibles and SIR's.** Any deductibles or self-insured retentions in **CONSULTANT'S** insurance policies must be declared to and approved by the **PROJECT MANAGER** and City Attorney, and shall not reduce the limits of liability. Policies containing any self-insured retention (SIR) provision shall provide or be endorsed to provide that the SIR may be satisfied by either the named insured or **CITY** or other additional insured party. At **CITY'S** option, the deductibles or self-insured retentions with respect to **CITY** shall be reduced or eliminated to **CITY'S** satisfaction, or **CONSULTANT** shall procure a bond guaranteeing payment of losses and related investigations, claims administration, attorney's fees and defense expenses.

D. **Proof of Insurance.** **CONSULTANT** shall provide to the **PROJECT MANAGER** or **CITY'S** City Attorney all of the following: (1) Certificates of Insurance evidencing the insurance coverage required in this Agreement; (2) a copy of the policy declaration page and/or endorsement page listing all policy

endorsements for the commercial general liability policy, and (3) excerpts of policy language or specific endorsements evidencing the other insurance requirements set forth in this Agreement. **CITY** reserves the right to obtain a full certified copy of any insurance policy and endorsements from **CONSULTANT**. Failure to exercise this right shall not constitute a waiver of the right to exercise it later. The insurance shall be approved as to form and sufficiency by **PROJECT MANAGER** and the City Attorney.

11. **INDEMNIFICATION.**

A. Except as otherwise provided in Paragraph B., **CONSULTANT** shall, to the fullest extent permitted by law, indemnify, release, defend with counsel approved by **CITY**, and hold harmless **CITY**, its officers, agents, employees and volunteers (collectively, the “**City Indemnitees**”), from and against any claim, demand, suit, judgment, loss, liability or expense of any kind, including but not limited to reasonable attorney’s fees, expert fees and all other costs and fees of litigation, (collectively “**CLAIMS**”), arising out of **CONSULTANT’S** performance of its obligations or conduct of its operations under this Agreement. The **CONSULTANT’S** obligations apply regardless of whether or not a liability is caused or contributed to by the active or passive negligence of the **City Indemnitees**. However, to the extent that liability is caused by the active negligence or willful misconduct of the **City Indemnitees**, the **CONSULTANT’S** indemnification obligation shall be reduced in proportion to the **City Indemnitees’** share of liability for the active negligence or willful misconduct. In addition, the acceptance or approval of the **CONSULTANT’S** work or work product by the **CITY** or any of its directors, officers or employees shall not relieve or reduce the **CONSULTANT’S** indemnification obligations. In the event the **City Indemnitees** are made a party to any action, lawsuit, or other adversarial proceeding arising from **CONSULTANT’S** performance of or operations under this Agreement, **CONSULTANT** shall provide a defense to the **City Indemnitees** or at **CITY’S** option reimburse the **City Indemnitees** their costs of defense, including reasonable attorneys’ fees, incurred in defense of such claims.

B. Where the services to be provided by **CONSULTANT** under this Agreement are design professional services to be performed by a design professional as that term is defined under Civil Code Section 2782.8, then, to the extent permitted by law including without limitation, Civil Code sections 2782, 2782.6 and 2782.8, **CONSULTANT** shall indemnify and hold harmless the **CITY** and its officers, officials, and employees (collectively **City Indemnitees**) from and against damages, liabilities or costs (including incidental damages. Court costs, reasonable attorney’s fees as may be determined by the Court, litigation expenses and fees of expert witnesses incurred in connection therewith and costs of investigation) to the extent they are caused by the negligence, recklessness, or willful misconduct of **CONSULTANT**, or any subconsultants, or subcontractor or anyone directly or indirectly employed by them, or anyone for whom they are legally liable (collectively **Liabilities**). Such obligation to hold harmless and indemnify any indemnity shall not apply to the extent that such **Liabilities** are caused in part by the negligence or willful misconduct of such **City Indemnitee**.

C. The defense and indemnification obligations of this Agreement are undertaken in addition to, and shall not in any way be limited by, the insurance obligations contained in this Agreement, and shall survive the termination or completion of this Agreement for the full period of time allowed by law.

12. NONDISCRIMINATION.

**CONSULTANT** shall not discriminate, in any way, against any person on the basis of age, sex, race, color, religion, ancestry, national origin or disability in connection with or related to the performance of its duties and obligations under this Agreement.

13. COMPLIANCE WITH ALL LAWS.

**CONSULTANT** shall observe and comply with all applicable federal, state and local laws, ordinances, codes and regulations, in the performance of its duties and obligations under this Agreement. **CONSULTANT** shall perform all services under this Agreement in accordance with these laws, ordinances, codes and regulations. **CONSULTANT** shall release, defend, indemnify and hold harmless **CITY**, its officers, agents and employees from any and all damages, liabilities, penalties, fines and all other consequences from any noncompliance or violation of any applicable laws, ordinances, codes or regulations.

14. NO THIRD PARTY BENEFICIARIES.

**CITY** and **CONSULTANT** do not intend, by any provision of this Agreement, to create in any third party, any benefit or right owed by one party, under the terms and conditions of this Agreement, to the other party.

15. NOTICES.

All notices and other communications required or permitted to be given under this Agreement, including any notice of change of address, shall be in writing and given by personal delivery, or deposited with the United States Postal Service, postage prepaid, addressed to the parties intended to be notified. Notice shall be deemed given as of the date of personal delivery, or if mailed, upon the date of deposit with the United States Postal Service. Notice shall be given as follows:

TO **CITY**'s Project Manager:

Bill Guerin  
Director of Public Works  
City of San Rafael  
111 Morpew Street  
San Rafael, CA 94901

TO **CONSULTANT**'s Project Director:

David Parisi  
Parisi/CSW Design Group  
1750 Bridgeway, Suite B208  
Sausalito, CA 94965



16. INDEPENDENT CONTRACTOR.

For the purposes, and for the duration, of this Agreement, **CONSULTANT**, its officers, agents and employees shall act in the capacity of an Independent Contractor, and not as employees of the **CITY**. **CONSULTANT** and **CITY** expressly intend and agree that the status of **CONSULTANT**, its officers, agents and employees be that of an Independent Contractor and not that of an employee of **CITY**.

17. ENTIRE AGREEMENT -- AMENDMENTS.

A. The terms and conditions of this Agreement, all exhibits attached, and all documents expressly incorporated by reference, represent the entire Agreement of the parties with respect to the subject matter of this Agreement.

B. This written Agreement shall supersede any and all prior agreements, oral or written, regarding the subject matter between the **CONSULTANT** and the **CITY**.

C. No other agreement, promise or statement, written or oral, relating to the subject matter of this Agreement, shall be valid or binding, except by way of a written amendment to this Agreement.

D. The terms and conditions of this Agreement shall not be altered or modified except by a written amendment to this Agreement signed by the **CONSULTANT** and the **CITY**.

E. If any conflicts arise between the terms and conditions of this Agreement, and the terms and conditions of the attached exhibits or the documents expressly incorporated by reference, the terms and conditions of this Agreement shall control.

18. SET-OFF AGAINST DEBTS.

**CONSULTANT** agrees that **CITY** may deduct from any payment due to **CONSULTANT** under this Agreement, any monies which **CONSULTANT** owes **CITY** under any ordinance, agreement, contract or resolution for any unpaid taxes, fees, licenses, assessments, unpaid checks or other amounts.

19. WAIVERS.

The waiver by either party of any breach or violation of any term, covenant or condition of this Agreement, or of any ordinance, law or regulation, shall not be deemed to be a waiver of any other term, covenant, condition, ordinance, law or regulation, or of any subsequent breach or violation of the same or other term, covenant, condition, ordinance, law or regulation. The subsequent acceptance by either party of any fee, performance, or other consideration which may become due or owing under this Agreement, shall not be deemed to be a waiver of any preceding breach or violation by the other party of any term, condition, covenant of this Agreement or any applicable law, ordinance or regulation.

20. COSTS AND ATTORNEY'S FEES.

The prevailing party in any action brought to enforce the terms and conditions of this Agreement, or arising out of the performance of this Agreement, may recover its reasonable costs (including claims administration) and attorney's fees expended in connection with such action.

21. CITY BUSINESS LICENSE / OTHER TAXES.

**CONSULTANT** shall obtain and maintain during the duration of this Agreement, a **CITY** business license as required by the San Rafael Municipal Code **CONSULTANT** shall pay any and all state and federal taxes and any other applicable taxes. **CITY** shall not be required to pay for any work performed under this Agreement, until **CONSULTANT** has provided **CITY** with a completed Internal Revenue Service Form W-9 (Request for Taxpayer Identification Number and Certification).

22. SURVIVAL OF TERMS.

Any terms of this Agreement that by their nature extend beyond the term (or termination) of this Agreement shall remain in effect until fulfilled, and shall apply to both Parties' respective successors and assigns.

23. APPLICABLE LAW.

The laws of the State of California shall govern this Agreement.

24. COUNTERPARTS AND ELECTRONIC SIGNATURE.

This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute one document. Counterpart signature pages may be delivered by telecopier, email or other means of electronic transmission.

**IN WITNESS WHEREOF**, the parties have executed this Agreement as of the day, month and year first above written.

**CITY OF SAN RAFAEL**

**CONSULTANT**

\_\_\_\_\_  
JIM SCHUTZ, City Manager

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

ATTEST:

[If Consultant is a corporation, add signature of second corporate officer]

\_\_\_\_\_  
LINDSAY LARA, City Clerk

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

APPROVED AS TO FORM:

\_\_\_\_\_  
ROBERT F. EPSTEIN, City Attorney

Project Number: 7.776.561

November 21, 2018

Mr. Kevin McGowan Sent via Email (Kevin.McGowan@cityofsanrafael.org)  
Assistant Public Works Director  
City of San Rafael Department of Public Works  
111 Morpew Street  
San Rafael, CA 94901

**Subject:** ROUTE 101 NORTHBOUND OFF-RAMP TO 2<sup>ND</sup> STREET

Dear Kevin:

Parisi-CSW Design Group appreciates the opportunity to present our scope and fee proposal for the Route 101 Northbound off-ramp project for the City of San Rafael. We understand Caltrans is in the process of completing design and soliciting bids to replace the bridge over Mahon Creek at the northbound off-ramp to central San Rafael. The project includes full replacement of the existing bridge with a wider structure, modifications to the intersection and traffic signal at the terminus of the off-ramp at Second and Irwin Streets. The Caltrans project includes minor property acquisitions and encroachment into the City's Right-of-Way. The City of San Rafael desires to add to this project to further widen the off-ramp and thereby allow a fifth lane to ease congestion and move vehicles through the intersection more efficiently. Parisi-CSW prepared a preliminary plan showing the additional lane and reconfigured the lane alignment to accomplish this goal. The City and Parisi-CSW met with Caltrans, received comments and made slight changes to the plan to maintain Caltrans' objectives. The conceptual plan was accepted by Caltrans Staff on September 24, 2018. Listed below is our scope of work to complete the design of the additional lanes.

## **SCOPE OF SERVICES**

The following assumptions and limitations are part of this scope and fee proposal:

- Plans will follow the approved the Preliminary Plans prepared by Parisi-CSW dated September 6, 2018
- All digital files of the Irwin Street Off-Ramp Plan will be provided by Caltrans and convertible to AutoCAD and all plans will be prepared in AutoCAD format
- No additional Field Survey is required
- All boundary and R/W has been surveyed by and be provided to Parisi-CSW by Caltrans in digital and hard copy format
- No presentations or appearances before City Council or other public agencies are included

- Plans will be provided at 60%, 99% and Final incorporating prior comments and assume two reviews by Caltrans and the City
- The Phased Traffic Control Plan will annotate and modify as necessary using the bridge replacement project plans
- Additional environmental documents beyond those prepared for the bridge project will not be required
- The enhancements shown on the Parisi-CSW plans will be incorporated into Caltrans CCO
- No encroachment permit will be required
- Northwest and Southwest curb ramps at 2<sup>nd</sup> Street intersection will be designed by Caltrans
- Proposed improvements will meet City Standards (Caltrans standards are not required)
- Revisions to the Encroachment Permit Storm Water Assessment and Flood Plain Encroachment Permit and Hydraulic Study Form are not required.
- PS&E will be completed by March 1, 2019

The following comprises our proposed scope of services and budgetary estimate:

**TASK 1: Plans, Specifications, and Estimate (PS&E):**

*Parisi-CSW will prepare 60%, 99%, and 100% phased Plans, Specifications and Estimate (PS&E) to reconfigure the northbound off-ramp at Central San Rafael from four lanes to five lanes.*

**a. Construction Plans:** Parisi-CSW will use the “ready to list” (RTL) plans that Caltrans has completed as our “existing conditions” to create a 60% level plan set. The 60% plan set will include a horizontal layout to accommodate the additional lane, modifications to the drainage structures, and layout of intersection and necessary curb and sidewalk changes. We will verify right-of-way and necessary construction easement(s) required to build a retaining wall along the east side of the off-ramp approaching 2nd street. We will identify signal changes required to poles, signal and conduit locations, including mast arm requirements. Following review and plan check comments, we will refine the plans for inclusion in the 99% CD submittal to Caltrans. We assume one (1) round of review and comments from Caltrans prior to submitting the 100% (bid set) construction plans. Construction Plans are anticipated to include the following:

- Cover Sheet
- Notes Sheet and Details
- Horizontal Control Plan (similar to CT layout plans)
- Grading Plan
- Drainage Plan
- Wall Layout and Detail Sheet
- Signing and Striping Plan
- Intersection Detail sheet to show Curb Ramps and Sidewalks
- Signal Plans
- Phased Traffic Control Plans
- Erosion Control Plan

**b. Technical Specifications:** Parisi-CSW will prepare technical project specifications at the 60%, 99%, and 100% CD levels. Technical specification format will be Caltrans or as indicated by

the City staff. City staff will assembly our specifications into a complete book of specifications for the project.

- c. **Statement of Probable Construction Cost:** Parisi-CSW will prepare a line item Opinion of Probable Cost based on our improvements for the 60%, 99%, and 100% (bid set) phases.

**Deliverables:** (10) copies 24x36 60%, 99%, 100% Plans, (10) copies Project Specifications and Estimate, 60%, 99%, 100% PS&E (pdf)

**TASK 2: Temporary Construction Easement (TCE):** Parisi-CSW anticipates coordination and preparation of one (1) TCE with BioMarin. We assume the project includes federal funding and no permanent structures will be located outside the City or State right-of-way. Construction access is assumed on a portion of BioMarin property. We will retain a third party right-of-way agent and appraiser to coordinate and prepare TCE documents with BioMarin.

If this project does not include federal funding, then a Right of Entry may be utilized. Parisi-CSW and/or a right-of-way agent will coordinate and assist City staff with preparation of one (1) Right of Entry with BioMarin.

### **TASK 3: Project Management**

- a. **Project Schedule:** Parisi-CSW will present project schedules using Microsoft Projects. We will update the schedule as needed for project team meetings. We will include a table of tasks with percent completion, deliverable dates, design team meetings, and milestones. The schedule will be updated and presented at each project team meetings.
- b. **Project Design Team Meetings:** Our proposal includes up to three (3) total design meetings. We will coordinate and prepare an agenda and updated schedule for each meeting. Following each meeting, we will generate a set of minutes outlining the issues discussed, identifying questions to be answered and whose court the ball to answer the question lies (action items) as well as a target date for completing. Since we are a local firm, we anticipate face-to-face meetings. If necessary, we can meet in our office or on-site to discuss or review specific items of concern.

We assume one (1) meeting or conference call with Caltrans staff to:

- Confirm conceptual plan
- Confirm required application forms/documents
- Resolve R/W inconsistency on Caltrans Appraisal Map

- c. **Quality Control:** Parisi-CSW's quality control will be led by our principal and project manager. Construction documents shall be review by the project management prior to each submittal. To help clarify plan check comments, we will provide a response letter to each comment.
- d. **Fact Sheet, PEER, and Traffic Operation Memo:** Parisi-CSW will assist the City in preparation of the Caltrans application and support documents for the PS&E submittal. We anticipate and included time for preparation of the Fact Sheet to Mandatory Design Standards, Permit Engineering Evaluation Report, and Traffic Operation Memo. The Fact Sheet will include a project description, history, safety improvements, features requiring exceptions, estimate,



accident history, existing and future traffic volumes, potential for future improvements, project location map, and plats for the non-standard features. The Permit Engineering Evaluation Report (PEER) will include project description, engineer's estimate, review of impact to highway traffic, and an analysis for geometric and functional adequacy. We will assist the City in obtaining the necessary signatures for both the Fact Sheet and PEER.

**Deliverables:** Monthly Project Schedules, Meeting Minutes (Word or PDF), (10) Fact Sheet, (10) PEER, (10) Traffic Operations Memo

Any services beyond those specifically outlined above will be billed as Additional Services. The inclusion of Additional Services to the Scope of Work will require written amendment.

### CLIENT TO PROVIDE

The following is a list of items to be provided to us in order to perform the above Scope of Services:

- Executed Contract
- Project Manager to serve as single point of contact
- Payment of Agency fees

### SCHEDULE

Parisi-CSW can begin work immediately upon receiving a signed contract or written authorization to proceed. We require 48 hour advance notice in writing (staking request form) in order to prepare calculations, coordinate scheduling, and to mobilize a crew on site for stake out.

### COMPENSATION

Parisi-CSW proposes to complete the services described above on a time and expense basis. Please refer to the table below for the cost per phase:

Task 1: Plans, Specifications, & Estimates	\$73,900
Task 2: Temporary Construction Easement	\$13,800
Task 3: Project Management	\$33,800
<b>Total:</b>	<b>\$121,500</b>

### ADDITIONAL SERVICES

Parisi-CSW agrees to perform all of the items listed in the Scope of Services. However the following items are excluded from the Scope of Services of this contract. They may be added at the request of the Owner as a revision to this proposal, or under a future proposal or amendment. Fees for these services will be billed on a time and expense basis, in accordance with our then current Hourly Rates and Billing Policy, with a budget estimate provided or for a fixed fee based upon a defined scope of work. Additional items we can provide include (but are not limited to):

- Supplemental Field Survey, Boundary Survey, Legal Descriptions
- Attendance at Public/Neighborhood Meetings
- Construction Staking
- Bid & Construction Support
- Environmental Permitting, CEQA Support

## **SERVICES AND STANDARD OF CARE**

Parisi-CSW's services shall be limited to those expressly set forth above. We shall have no other obligations or responsibilities for the project except as agreed to in writing, or as provided in this agreement. Parisi-CSW's services shall be provided consistent with, and limited to, the standard of care applicable to such services. We shall provide its services consistent with the professional skill and care ordinarily provided by consultants practicing in the same or similar locality under the same or similar circumstances.

Thank you for the opportunity to present this proposal. Please call me at (415.883.9850 ext. 170) or send me an email at [ACornwell@cswst2.com](mailto:ACornwell@cswst2.com) if you have any questions regarding our proposal.

Sincerely,

**Parisi-CSW Design Group**



Al Cornwell, PE  
R.C.E. #27577



**SAN RAFAEL CITY COUNCIL AGENDA REPORT**

**Department: Public Works**

**Prepared by: Lisa Goldfien, Asst. City Attorney**  
**Bill Guerin, Public Works Director**

**City Manager Approval:** 

**TOPIC: FIRE STATION 57 CONSTRUCTION PROJECT**

**SUBJECT: RESOLUTION APPROVING A FIRST AMENDMENT TO LEASE AGREEMENT BETWEEN THE COUNTY OF MARIN, COUNTY SERVICE AREA 19, AND THE CITY OF SAN RAFAEL CONCERNING FIRE STATION 57 AT 3535 CIVIC CENTER DRIVE**

**RECOMMENDATION:**

Adopt a resolution approving the First Amendment to the Lease Agreement between the County of Marin, County Service Area 19, and the City of San Rafael concerning Fire Station 57 at 3535 Civic Center Drive.

**BACKGROUND:**

The County of Marin, County Service Area 19 ("CSA 19"), and the City of San Rafael have worked together since 1976 to provide fire protection services to a number of unincorporated areas within CSA 19 that are contiguous to the City of San Rafael (Santa Venetia, Los Ranchitos, Country Club, Bayside Acres and California Park). As part of an agreement in 1976, the County leased the land at 3535 Civic Center Drive to the City for a 30-year term, at an annual cost to the City of \$1. The City constructed Fire Station 57 on the property, with the County contributing \$85,000 to the construction, which was one half of the cost. In 2006, the County, CSA 19, and the City entered into a new 10-year lease under which the City paid market value to lease the land where Fire Station 57 is located, and the City was compensated by the County and CSA 19 for fire protection services provided to unincorporated areas.

In 2016, the County, the City, and CSA 19 entered into a new lease of the land at Fire Station 57 ("Lease Agreement"). In view of the City's decision to build a new Fire Station 57 at 3535 Civic Center Drive, one of the terms of the Lease Agreement was for a contribution to the costs of that project by CSA 19. At the time the Lease Agreement was negotiated, the project costs were estimated to be \$12 million. CSA 19 agreed to contribute 46 percent (46%) of the project costs, not to exceed \$5,520,000, and the City agreed to pay 54 percent (54%) of the costs plus all expenses in excess of \$12 million.

The City is now in the process of constructing new Fire Station 57.

**FOR CITY CLERK ONLY**

**File No.:** \_\_\_\_\_

**Council Meeting:** \_\_\_\_\_

**Disposition:** \_\_\_\_\_

**ANALYSIS:**

During construction of Fire Station 57, the City's contractor encountered unforeseen site conditions that have caused the total costs of the project to increase by a projected \$1,425,000. In recognition and furtherance of their ongoing partnership with the City, and of their desire to work together to ensure timely completion of Fire Station 57 for the benefit of all, the County of Marin and CSA 19 have agreed to contribute additional funds towards the increased project costs. Since the Lease Agreement provides for CSA 19 to pay 46 percent (46%) of the total project costs for Fire Station 57, the County/CSA 19 are willing to pay 46 percent (46%) of the increased costs, or an additional \$655,500.

Staff recommends that the City Council adopt the attached resolution approving a First Amendment to the Lease Agreement that memorializes this agreement. The First Amendment is attached as an exhibit to the resolution.

The First Amendment will also require approval by the County Board of Supervisors at one of its next meetings.

**FISCAL IMPACT:**

Approval of the First Amendment to Lease Agreement by all parties will result in a payment by the County/CSA 19 of up to an additional \$655,500 towards the Fire Station 57 project if total project costs increase by at least \$1,425,000.

**OPTIONS:**

The City Council has the following options to consider on this matter:

1. Adopt the resolution approving the First Amendment to Lease Agreement as presented.
2. Adopt the resolution with modifications.
3. Direct staff to return with more information.
4. Take no action.

**RECOMMENDED ACTION:**

Adopt the resolution approving the First Amendment to Lease Agreement between the County of Marin, County Service Area 19, and the City of San Rafael.

**ATTACHMENTS:**

1. Resolution
2. Exhibit A to Resolution: First Amendment to Lease Agreement

RESOLUTION NO. \_\_\_\_\_

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SAN RAFAEL APPROVING A FIRST AMENDMENT TO LEASE AGREEMENT BETWEEN THE COUNTY OF MARIN, COUNTY SERVICE AREA 19, AND THE CITY OF SAN RAFAEL CONCERNING FIRE STATION 57 AT 3535 CIVIC CENTER DRIVE**

**WHEREAS**, since 1976, the City of San Rafael, the County of Marin and County Service Area 19 of the County of Marin (“CSA 19”) have cooperated in the provision of fire services to a number of unincorporated areas within CSA 19 that are contiguous to the City of San Rafael (Santa Venetia, Los Ranchitos, Country Club, Bayside Acres and California Park), through the County’s lease of County-owned property at 3535 Civic Center Drive (the “Property”) to the City, and the City’s construction and operation of a fire station on the Property (“Fire Station 57”) with monetary contributions by CSA 19; and

**WHEREAS**, the Essential Facilities Strategic Plan adopted by the City Council on July 20, 2015 provides for the construction of a new Fire Station 57 on the Property; and

**WHEREAS**, the current lease agreement for the Property, entered into on June 21, 2016 between the County of Marin, CSA 19 and the City of San Rafael (hereafter the “Lease Agreement”) provides that the City will pay the County rent for the Property and will construct a new Fire Station 57 on the Property, and that CSA 19 will make a contribution to the City’s costs of the construction project; and

**WHEREAS**, the Lease Agreement estimated the total project costs for the construction of new Fire Station 57 to be \$12.0 million, and provides for the City to bear 54.0% of the project costs and all project costs in excess of \$12.0 million, and for CSA to bear 46.0% of the project costs, not to exceed \$5,520,000; and

**WHEREAS**, the City is now in the process of constructing new Fire Station 57; and

**WHEREAS**, during construction the City encountered unexpected site conditions at the Property that required additional City construction costs, which also delayed the Fire Station 57 construction project; and

**WHEREAS**, the total additional costs of the project are estimated to total at least \$1,425,000; and

**WHEREAS**, in recognition and furtherance of their ongoing partnership, the City of San Rafael, the County of Marin and CSA 19 desire to work together to ensure timely completion of Fire Station 57 for their mutual benefit and to share in the additional project costs, and wish to memorialize their agreement in an amendment to the Lease Agreement;

**NOW THEREFORE, BE IT RESOLVED** by the San Rafael City Council that the Mayor is hereby authorized to execute, on behalf of the City, the “First Amendment to Lease Agreement” attached hereto as Exhibit A, subject to final approval as to form by the City Attorney;

**BE IT FURTHER RESOLVED**, that the City Manager is authorized to take such other and further actions as he deems necessary to implement the executed First Amendment to Lease Agreement.

I, LINDSAY LARA, City Clerk of the City of San Rafael, hereby certify that this Resolution was duly and regularly introduced and adopted at a regular meeting of said City Council held on the 3<sup>rd</sup> day of December 2018 by the following vote, to wit:

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

\_\_\_\_\_  
LINDSAY LARA, City Clerk



**FIRST AMENDMENT TO LEASE AGREEMENT**

**THIS FIRST AMENDMENT TO LEASE AGREEMENT** (First Amendment), is made and entered into this 4<sup>th</sup> day of December 2018, by and between the COUNTY OF MARIN, hereinafter referred to as "COUNTY", COUNTY SERVICE AREA 19 OF THE COUNTY OF MARIN, hereinafter referred to as "CSA", and the CITY OF SAN RAFAEL, hereinafter referred to as "CITY".

**WHEREAS**, the parties entered into a Lease Agreement dated June 21, 2016 (Lease) for the property where Fire Station #57 is located, more fully described in Paragraph 4 of the Lease Agreement (Property);

**WHEREAS**, CITY is in the process of constructing a new Fire Station #57 on the Property (the "Project");

**WHEREAS**, pursuant to Paragraph 1 of the Lease, the total project costs were estimated to be \$12.0 million, with CITY to bear 54.0% of the project costs and all project costs in excess of \$12.0 million, and CSA to bear 46.0% of the project costs, not to exceed \$5,520,000; and

**WHEREAS**, during construction CITY encountered unexpected site conditions at the Property owned by County as lessor that required additional City construction costs, which also delayed the Project;

**WHEREAS**, the total additional costs of said Project are estimated to total at least \$1,425,000;

**WHEREAS**, the parties desire to work together to ensure timely completion of Fire Station #57 for mutual benefit and share in said additional costs.

**NOW THEREFORE**, it is mutually agreed that the Lease shall be amended as follows:

1. Paragraph 1 of the Lease shall be amended to increase the total estimated project budget from \$12.0 million to \$13,425,000 to reflect the unanticipated additional project costs; to increase the cap on the CSA's contribution from \$5,520,000 to \$6,175,500, and to reflect that CITY shall bear all project costs in excess of \$13,425,000.
2. Except as expressly modified by this First Amendment, all other terms and conditions of the Lease, not specifically modified, amended or superseded herein, shall continue in full force and effect.

**IN WITNESS WHEREOF**, the parties hereto have caused this First Amendment to be executed by their duly authorized agents on the day and year first written above.

CITY OF SAN RAFAEL

COUNTY OF MARIN and COUNTY  
SERVICE AREA 19

\_\_\_\_\_  
GARY O. PHILLIPS, Mayor

\_\_\_\_\_  
President of the Board of Supervisors

ATTEST:

ATTEST:

\_\_\_\_\_  
LINDSAY LARA, City Clerk

\_\_\_\_\_  
County Clerk

APPROVED AS TO FORM:

APPROVED AS TO FORM:  
BRIAN WASHINGTON, County Counsel

\_\_\_\_\_  
ROBERT F. EPSTEIN, City Attorney

\_\_\_\_\_  
JENNA BRADY, Deputy County Counsel



**SAN RAFAEL CITY COUNCIL AGENDA REPORT**

Department: City Manager's Office

Prepared by: Andrew Hening,  
Director of Homeless  
Planning & Outreach

City Manager Approval: \_\_\_\_\_

**TOPIC:** RENTAL DISCRIMINATION ORDINANCE

**SUBJECT:** AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SAN RAFAEL AMENDING THE SAN RAFAEL MUNICIPAL CODE BY ADDING NEW CHAPTER 10.98 CONCERNING "SOURCE OF INCOME" DISCRIMINATION IN RENTAL HOUSING

**RECOMMENDATION:** Conduct a public hearing regarding a proposed ordinance to add Chapter 10.98, entitled "Rental Housing Source of Income Discrimination", to the San Rafael Municipal Code concerning source of income discrimination in rental housing and pass the ordinance to print.

**BACKGROUND:** In November of 2016, the Marin County Board of Supervisors adopted a [Source of Income Fair Housing Ordinance](#) intended to eliminate limitations in the provision of rental housing merely because a family, Veteran, or other renter receives third party rental assistance, such as a Housing Choice Voucher (Section 8), a Veterans Affairs Supportive Housing (VASH) Voucher, a Housing for People with AIDS Voucher, or the Shelter Plus Care Voucher. The County has asked that individual cities consider the adoption of a similar ordinance to create consistent rental opportunities throughout Marin, regardless of a renter's source of income.

**ANALYSIS:** When someone pays rent for a room, apartment, or house, there are a variety of ways in which they might source the revenue for that expense. They could use income from a job, a pension, disability or social security payments, money from a friend or parent, child support payments, or alimony payments. They may also receive rental assistance from the government or some other third party resource.

In 1968, Congress passed the Fair Housing Act which was intended to protect buyers and renters from seller or landlord discrimination. Its primary prohibition makes it unlawful to refuse to sell to, rent to, or negotiate with any person because of that person's inclusion in a protected class. In 1974, Congress passed the Community Development Act, which created the Housing Choice Voucher (Section 8). Housing vouchers are not free housing. Voucher recipients are required to pay 30% of their income towards their housing expenses, and the voucher covers the rest.

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**FOR CITY CLERK ONLY**

**File No.:**

**Council Meeting:**

**Disposition:**

The goal of the voucher program was two-fold. First, it was an opportunity to move away from the public housing model, wherein the government built and managed housing units. Chronically underfunded, these facilities often fell into disrepair and resulted in concentrations of poverty and crime. Second, the Fair Housing Act was passed in response to extensive and pervasive discrimination in the housing market. Redlining, for example, was a government-endorsed policy that allowed financial lenders to deny home loans and insurance to people because they lived in “financially risky areas.” The Federal Housing Administration (FHA) set the industry standards for what type of mortgages the federal government would insure. Without ever showing proof, the FHA claimed that integrated neighborhoods would reduce home values, which would in turn increase mortgage. As a result, the FHA deemed neighborhoods with racially restrictive covenants as safer investments, effectively blocking people of color from moving to more affluent communities, even if they had the resources to do so (Source: Color of Law). Housing vouchers were seen as a way to affirmatively further fair housing because rental assistance would give people the opportunity to move out of public housing and/or neighborhoods that had been subject to redlining. This vision for using vouchers to reverse the impacts of past housing discrimination only works if people with vouchers actually have a meaningful choice in a community’s overall rental market.

50 years after the passage of the Fair Housing Act, housing discrimination persists in our community. To substantiate the need for source of income protections, the Marin Housing Authority reported to the Marin County Board of Supervisors that between January 1, 2014 and August 31, 2016 a total of 2,194 Housing Choice rental subsidy vouchers were issued to low-income Marin households. Nearly half were unable to find landlords in the county willing to accept their vouchers and, as a result, lost their vouchers. Rental listings advertising “no Section 8” were found to be common in Marin. As of September 2018, this practice still persists in San Rafael.

Current state law prohibits housing discrimination based on a person’s source of income (California Government Code Section 12921), but case law has established that California’s source of income discrimination law does not protect individuals or families with third party rental subsidies because rental payments do not qualify as a source of income when they are paid directly to the landlord (*i.e.* the third party provider pays the landlord directly, rather than the payment going to the tenant and then the tenant paying the landlord). State law, however, does not preempt municipalities from adopting a distinct Fair Housing Ordinance that recognizes third-party housing subsidies or vouchers as a source of income. Such ordinances have been demonstrated to reduce voucher rejections by as much as [50 percent](#).

[The County of Marin](#), [the Town of Fairfax](#), and [the City of Novato](#) have all passed such “source of income” ordinances to protect renters from potential discrimination. The proposed ordinance, modeled after these other communities, would prohibit the following activities by landlords related to source of income:

- A. To interrupt, terminate, or refuse to initiate any transaction in real property because of a tenant’s source of income.
- B. To include in the terms or conditions of a transaction in real property any discriminating clause, condition or restriction due to the tenant’s source of income.
- C. To refuse or restrict facilities, services, repairs or improvements because of the tenant’s source of income.

- D. To make, print, publish, advertise, or disseminate any notice, statement or advertisement with respect to a transaction in real property that indicates preference, limitation or discrimination based on source of income.

Importantly, the proposed ordinance would not prevent or hinder property owners and landlords from screening renters and retaining freedom of choice based on other factors such as total income, credit scores, rental history, references, etc. However, the source of income ordinance also establishes that an income requirement can only be applied to the tenant's portion of the rent if they receive a third-party subsidy. For programs like Section 8, the federal government establishes market-rate payment standards for vouchers (see Exhibit 1 for the Marin Housing Authority's current payment standards). The voucher holder contributes 30% of their income, and the voucher covers the rest up to the payment standard.

**Exhibit 1 – Marin Housing Authority's Current Payment Standards**

<b>Unit Size</b>	<b>2018 Fair Market Value</b>	<b>Payment Standard</b>
Efficiency	\$2,014	\$1,813
1 Bedroom	\$2,499	\$2,250
2 Bedroom	\$3,121	\$2,809
3 Bedroom	\$4,070	\$3,663
4 Bedroom	\$4,346	\$4,346
5 Bedroom	\$4,998	\$4,998

Enforcement is expected to occur primarily through civil injunctive action; however, local ordinances have included a criminal penalty as well. If a tenant believes the ordinance has been violated, they may seek redress through the courts. Additionally, local civil rights advocacy agencies such as Legal Aid of Marin and Fair Housing Advocates of Northern California have committed to monitor and contact housing providers that are inconsistent with the ordinance based on complaints received.

***Policy Details for the Final Ordinance***

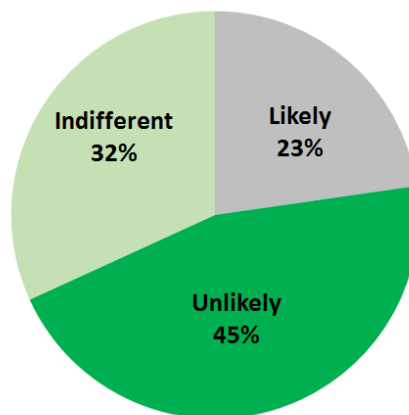
Based on [feedback from the City Council at the October 1, 2018 City Council meeting](#), staff has made the following changes to the final Ordinance:

1. 10.98.010 – Purpose. Staff had asked Council whether or not we should explicitly say we are prohibiting all discrimination based on any source of income in general (e.g. child support, disability payments), or if we should more narrowly say we are prohibiting “discrimination on the basis of tenants’ participation in third party rental assistance programs.” Based on Council feedback and the fact that the County of Marin and the City of Novato both adopted the broader language, the Final Ordinance includes the broader language.

2. 10.98.050 – Exceptions. Staff had asked Council whether or not we wanted this ordinance to apply to all rental housing in San Rafael, or if we wanted to create an exception for certain types of units, for example, an owner-occupied single-family residence that rents out a room. The initial draft ordinance included an exemption for “any housing unit in which the owner or any member of his/her family occupies one of the living units and it is necessary for the owner to use either a bathroom or kitchen facility common with the prospective tenant(s).” The County of Marin ultimately removed this exclusion for two reasons. First, “the elimination of this exception is intended to simplify the process for understanding and determining Ordinance applicability.” Additionally, “in Marin, accessory dwelling units, junior accessory dwelling units, and room rentals are a principal form of new housing stock that is likely to be affordable to low- and moderate-income households.”

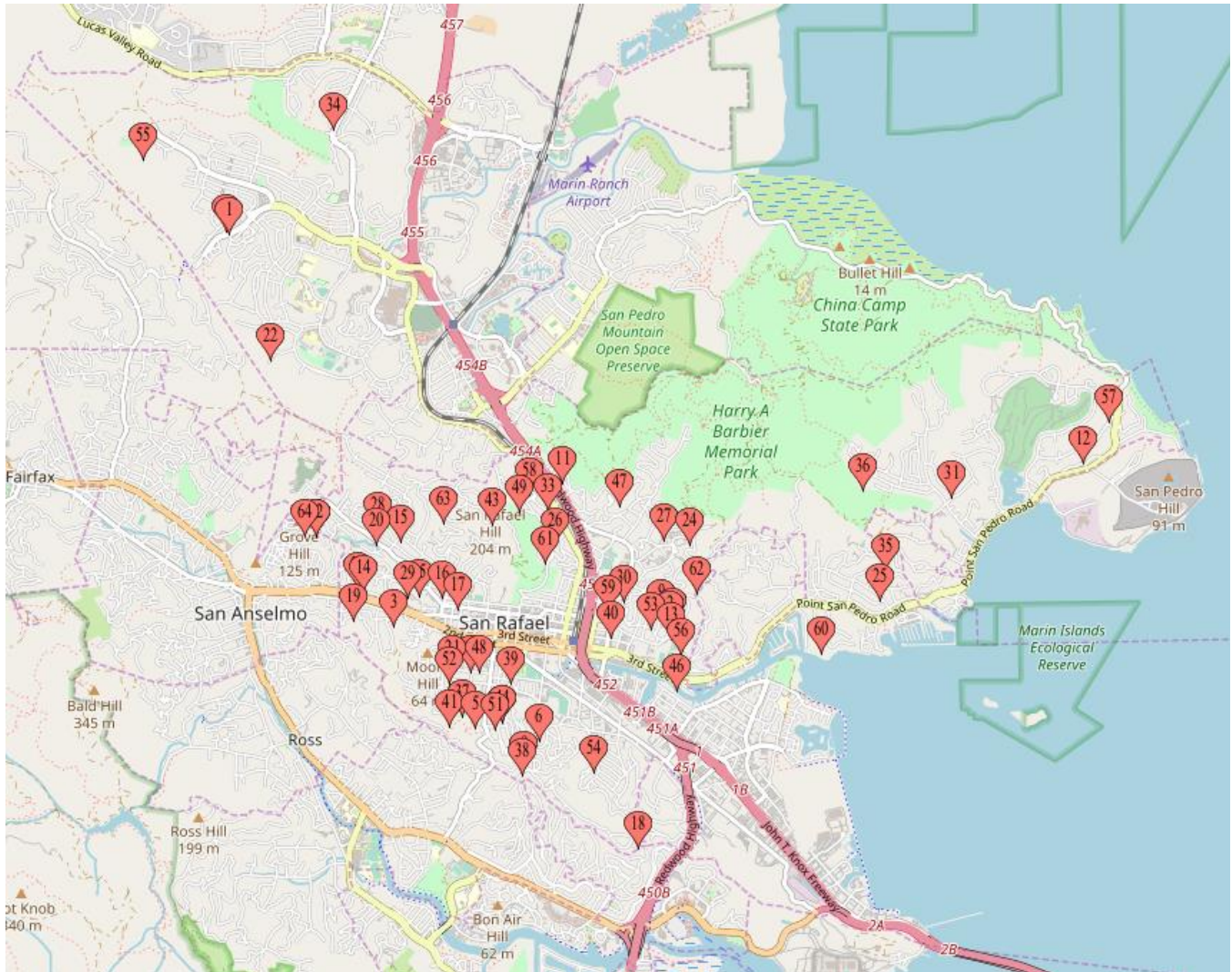
At the October 1<sup>st</sup> City Council meeting, in the spirit of affirmatively furthering fair housing, Council expressed support for eliminating any exceptions to the applicability of the Ordinance. However, Council also expressed interest in the potential impact this Ordinance could have on the creation of new Accessory Dwelling Units / Junior Second Units. As an important emerging housing type in San Rafael, there was concern as to whether or not the Source of Income Ordinance could jeopardize this nascent sector by deterring people from wanting to create units. Over the past four years, 77 households have initiated the process to create accessory dwelling units / junior accessory dwelling units in San Rafael. Staff was able to contact 26 of these households. Among other questions designed to help us improve our internal process, staff explicitly asked, “The City of San Rafael is currently considering adopting a fair housing ordinance. This ordinance would help to protect people who have third party housing vouchers (e.g. a Veterans Supportive Housing Voucher, Section 8) from rental discrimination by restricting landlords from saying they will not accept vouchers when advertising openings. If such an ordinance had been in place when you created your unit, would it have impacted your decision to pursue the creation of your unit?” 77% of respondents indicated that a source of income ordinance would have been unlikely or would have had no impact one way or another on their decisions to create an accessory dwelling unit (Exhibit 2 – Survey Response). Moreover, the surveys revealed that 100% of respondents were Caucasian, and units have been developed fairly equitably throughout the entire city (Exhibit 3 – A Map of Units Created as of October 2018). For all of these reasons, in an effort to affirmatively further fair housing, the Final Ordinance does not include any type of exclusion.

**Exhibit 2 – Survey Responses to Whether or not a Fair Housing Ordinance Would Impact a Household’s Decision to Create an Accessory Dwelling Unit**





**Exhibit 3 – A Map of Accessory Dwelling Units Created as October 2018**



3. Finally, there was a question about the criminal penalties outlined in the draft ordinance. The draft language read, “Any person who violates any provision of this chapter shall be deemed guilty of a misdemeanor and upon conviction thereof shall be punished by a fine of not more than one thousand dollars (\$1,000.00) or by imprisonment in the county jail for a period not exceeding six months, or both.” Upon further review, the City cannot levy a fine in excess of \$500.00. That change has been made to the final Ordinance. Importantly, in Marin there have been zero criminal prosecutions under this ordinance. Instead, the standard recourse has been for Legal Aid of Marin or Fair Housing Advocates of Northern California to contact individuals in violation of the ordinance and to counsel them on how to remedy or change the situation.

**PUBLIC OUTREACH:** A notice of public hearing was published in the Marin IJ ten days prior to this public hearing. Additionally, a public hearing notice was sent to the following organizations: Marin Rental Property Association, Marin County Community Development Agency, the Marin County Housing Authority, the League of Women Voters, EDEN Housing, Marin Environmental Housing Collaborative, Sustainable Marin, Sustainable San Rafael, Fair Housing of Marin, Marin Builders

Association, Public Advocates, Inc., Legal Aid of Marin, Marin Association of Realtors, Community Action Marin, Canal Alliance, the San Rafael Chamber of Commerce, the Downtown San Rafael Business Improvement District, Marin Continuum of Housing, the Housing Crisis Action Group, Aging Action Initiative, the Homeless Policy Steering Committee, Ritter Center, St. Vincent's, Homeward Bound, Buckelew Programs, the Marin Center for Independent Living, the Marin Organizing Committee, and the Federation of San Rafael Neighborhoods.

**FISCAL IMPACT:** There is no fiscal impact associated with this item.

**RECOMMENDED ACTION:** Conduct a public hearing regarding a proposed ordinance to add Chapter 10.98, entitled "Rental Housing Source of Income Discrimination", to the San Rafael Municipal Code concerning source of income discrimination in rental housing and pass the ordinance to print.

**ATTACHMENTS:**

1. Ordinance
2. Public Hearing Notice

**ORDINANCE NO. XXXXX**

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SAN RAFAEL AMENDING THE SAN RAFAEL MUNICIPAL CODE BY ADDING NEW CHAPTER 10.98 CONCERNING “SOURCE OF INCOME” DISCRIMINATION IN RENTAL HOUSING**

**THE CITY COUNCIL OF THE CITY OF SAN RAFAEL DOES ORDAIN AS FOLLOWS**

**DIVISION 1. FINDINGS.**

**WHEREAS**, it is unlawful under federal and state statutes to restrict housing choice on the basis of race, color, disability, religion, sex, familial status, national origin, sexual orientation, marital status, ancestry, age, and source of income; and

**WHEREAS**, the City of San Rafael is committed to providing and preserving fair and affordable housing for all income levels; and

**WHEREAS**, the City of San Rafael wants to increase the availability of housing to all income levels and eliminate any limitations in the provision of housing, including discrimination based on a person’s source of income; and

**WHEREAS**, the Marin Housing Authority, which administers the Housing Voucher Programs, including the Housing Choice Voucher Program, also known as “Section 8,” and the Veterans Affairs Supportive Housing Voucher Program, reports a shortage of landlords participating in the program; and

**WHEREAS**, this shortage may reflect discrimination against tenants with housing vouchers; and

**WHEREAS**, discrimination against housing voucher holders significantly reduces the stock of rental housing that is available to them; and

**WHEREAS**, California Government Code §12921 prohibits housing discrimination based on source of income as defined by §12955(p)(1), which does not protect Housing Choice voucher holders as established by case law (*SABI v. Sterling*, 183 Cal.App.4th 916 (2010)); and

**WHEREAS**, California and federal law further requires the County of Marin to identify impediments to providing affordable housing and to develop strategies for removing those impediments; and

**WHEREAS**, the City of San Rafael from time to time receives funding from the County of Marin to support its affordable housing initiatives; and

**WHEREAS**, in order to fulfill the City’s commitment to fair housing, to increase affordable housing opportunities, and to fulfill its legal obligations it is necessary to prohibit housing discrimination based on source of income.

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SAN RAFAEL DOES HEREBY ORDAIN AS FOLLOWS:**

## **DIVISION 2. MUNICIPAL CODE AMENDMENT**

New Chapter 10.98, entitled "Rental Housing Source of Income Discrimination," is hereby added to the San Rafael Municipal Code, to read as follows:

### **Chapter 10.98 - RENTAL HOUSING SOURCE OF INCOME DISCRIMINATION**

#### **10.98.010 - Purpose.**

It is the purpose and intent of the City of San Rafael in enacting this chapter that source of income-based discrimination does not occur in rental housing. This chapter does not intend to restrict or limit operational aspects of rental housing management, such as establishment of tenant rules, security requirements or other landlord/tenant conditions not related to sources of income or financial discrimination.

#### **10.98.020 - Definitions.**

For purposes of this chapter, the following definitions shall apply:

A. "Source of income" as used in this chapter means all lawful sources of income and/or all payments from a rental assistance program, homeless assistance program, security deposit assistance program or housing subsidy program, provided such funds are not paid directly to the tenant.

B. "Person" means any individual, firm, corporation, or other organization or group of persons, however organized.

#### **10.98.030 - Prohibited Activity.**

It is unlawful for any person to do any of the following related to the rental of real property for residential use when wholly or partially based on source of income, as defined herein:

A. To interrupt, terminate, or fail or refuse to initiate or conduct any transaction in real property, including, but not limited to, the rental thereof; to require different terms for such transaction; or falsely to represent that an interest in real property is not available for transaction;

B. To include in the terms or conditions of a transaction in real property any discriminating clause, condition or restriction due to source of income;

C. To refuse or restrict facilities, services, repairs or improvements for any tenant or lessee;

D. To make, print, publish, advertise, or disseminate in any way, or cause to be made, printed or published, advertised or disseminated in any way, any notice, statement or advertisement with respect to a transaction in real property, or with respect to financing related to any such transaction, which unlawfully indicates preference, limitation or discrimination based on source of income.

E. It is unlawful for any person to use a financial or income standard for the rental of housing that does either of the following:

1. Fails to account for any rental payments or portions of rental payments that will be made by other individuals or organizations, including by a rental assistance program, homeless assistance program, security deposit assistance program or housing subsidy program, on the same basis as rental payments to be made directly by the tenant or prospective tenant;
2. Fails to account for the aggregate income of persons residing together or proposing to reside together or an aggregate income of tenants or prospective tenants and their cosigners or proposed cosigners on the same basis as the aggregate income of married persons residing together or proposing to reside together, so long as legal occupancy limits are not exceeded.

**10.98.040 - Exceptions.**

A. Nothing in this chapter shall be deemed to permit any rental or occupancy of any dwelling unit or commercial space otherwise prohibited by law.

B. Nothing in this chapter shall be construed to prohibit a requirement for a guarantor or cosigner based on amount of income or credit worthiness.

**10.98.050 - Civil injunctive relief.**

Any aggrieved person may enforce the provisions of this chapter by means of a civil injunctive action. Any person who commits, or proposes to commit, an act in violation of this chapter may be enjoined therefrom by any court of competent jurisdiction. An action for injunction under this section may be brought by any aggrieved person, by county counsel, the district attorney, the City attorney, or by any person or entity which will fairly and adequately represent the interests of the protected class.

**10.98.060 - Civil liability.**

Any person who violates any of the provisions of this chapter or who aids in the violation of any provisions of this chapter is liable for, and the court may award to the individual whose rights are violated, up to three times the amount of special and general damages, or, in the case of unlawful discrimination in the rental of a unit, three times the amount of one month's rent that the landlord charges for the unit in question. The court may award in addition thereto reasonable attorney's fees, costs of action, and punitive damages. Civil actions filed pursuant to this section must be filed within one year of the alleged discriminatory acts.

**10.98.070 - Criminal penalty.**

Any person who violates any provision of this chapter shall be deemed guilty of a misdemeanor and upon conviction thereof shall be punished by a fine of not more than five hundred dollars (\$500.00) or by imprisonment in the county jail for a period not exceeding six months, or both.

**10.98.080 - Severability.**

If any provision of this chapter, or its application to any person or circumstance, is determined by a court of competent jurisdiction to be unlawful, unenforceable or otherwise void, that determination shall have no effect on any other provisions of this chapter or the application of this chapter to any other person or circumstance and, to that end, the provisions hereof are severable.

**DIVISION 3. CALIFORNIA ENVIRONMENTAL QUALITY ACT.**

This Ordinance is exempt from the California Environmental Quality Act (“CEQA”) pursuant to the State CEQA Guidelines, since it can be seen with certainty that there is no possibility that this Ordinance or its implementation would have a significant effect on the environment (14 Cal. Code Regs. Section 15061(b)(3)).

**DIVISION 4. PUBLICATION; EFFECTIVE DATE**

This Ordinance shall be published once, in full or in summary form, before its final passage, in a newspaper of general circulation, published, and circulated in the City of San Rafael, and shall be in full force and effect thirty (30) days after its final passage. If published in summary form, the summary shall also be published within fifteen (15) days after the adoption, together with the names of those Councilmembers voting for or against same, in a newspaper of general circulation published and circulated in the City of San Rafael, County of Marin, State of California.

\_\_\_\_\_  
GARY O. PHILLIPS, Mayor

ATTEST:

\_\_\_\_\_  
LINDSAY LARA, City Clerk

The foregoing Ordinance No. \_\_\_\_\_ was read and introduced at a regular meeting of the City Council of the City of San Rafael on the \_\_\_\_\_ day of \_\_\_\_\_, 2018, and was ordered passed to print by the following vote, to wit:

AYES: Councilmembers:

NOES: Councilmembers:

ABSENT: Councilmembers:

and will come up for adoption as an Ordinance of the City of San Rafael at a regular meeting of the City Council to be held on the \_\_\_\_\_ day of \_\_\_\_\_, 2018.

\_\_\_\_\_  
LINDSAY LARA, City Clerk



**CITY OF SAN RAFAEL**  
**NOTICE OF PUBLIC HEARING**

DATE/TIME: Monday, December 3, 2018 at 7:00 p.m.

LOCATION: City Council Chambers, 1400 Fifth Avenue, San Rafael, CA

PURPOSE: The San Rafael City Council will hold a public hearing to consider an ordinance that would add a new Chapter 10.98 to the San Rafael Municipal Code concerning “source of income” discrimination in rental housing.

State law prohibits housing discrimination based on a person’s source of income but does not protect individuals or families who rely on rental subsidies paid by a third party directly to the landlord rather than to the tenant for payment to the landlord. Examples of such subsidies include Housing Choice Vouchers (Section 8) and Veterans Affairs Supportive Housing (VASH) Vouchers. The proposed ordinance, similar to those recently adopted by Fairfax, Novato, and the County of Marin, is intended to eliminate this limitation in State law by recognizing these third-party housing subsidies as a source of income and prohibiting rental discrimination against persons relying on them. The ordinance would not however prevent landlords from screening renters and retaining freedom of choice based on other factors such as total income, credit scores, rental history, references, etc.

The City has determined that adoption of the ordinance is exempt from review under the California Environmental Quality Act (CEQA) as it does not have the potential to cause a significant, physical environmental effect on the environment.

You may comment on the proposed ordinance in person at the public hearing or submit written comments, which must be received by the City prior to the hearing.

IF YOU CANNOT  
ATTEND:

Written comments should be sent to Lindsay Lara, City Clerk, City of San Rafael, P.O. Box 151560, San Rafael, CA 94915-1560, City of San Rafael, 1400 Fifth Avenue, Room 209, San Rafael, CA 94901.

FOR MORE  
INFORMATION:

Contact the City of San Rafael’s Director of Homeless Planning and Outreach Andrew Hening at telephone (415) 485-3055.

SAN RAFAEL CITY COUNCIL

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LINDSAY LARA  
CITY CLERK, CITY OF SAN RAFAEL



**SAN RAFAEL CITY COUNCIL AGENDA REPORT**

Department: Community Development Department

*Paul A. Jensen*

Prepared by: Paul A. Jensen (PJ/AG/CP/LG),  
Community Development Director

City Manager Approval: \_\_\_\_\_

**TOPIC: SMALL CELL “5G” WIRELESS COMMUNICATION TECHNOLOGY**

**SUBJECT: REPORT ON SMALL CELL “5G” WIRELESS COMMUNICATION TECHNOLOGY TO INCLUDE: A) PRESENTATION ON RECENT FEDERAL COMMUNICATION COMMISSION (FCC) RULING REGARDING SMALL CELL FACILITIES; AND B) REVIEW OF DRAFT ORDINANCE, REGULATIONS AND STANDARDS FOR PERMITTING SMALL CELL FACILITIES. CITY CASE NOS. P18-016 & Z018-004**

**RECOMMENDATION:**

Accept report and direct staff to prepare an urgency ordinance and resolution for consideration at the December 17, 2018 meeting.

**EXECUTIVE SUMMARY:**

On September 26, 2018, the Federal Communications Commission (FCC) adopted a [Declaratory Ruling and Third Report and Order](#) geared toward speeding up deployment of small cell wireless facilities in the public right-of-way (hereafter, the “FCC ruling”). Small cell wireless facilities are designed to accommodate “5G” technology. The FCC ruling, which will go into effect in mid-January 2019, sets forth limitations on state and local government regulation of small cell wireless facilities that are placed on existing or new utility poles and street light standards located in the public right-of-way. The FCC ruling: a) limits the level of local permitting and discretion; b) establishes “shot clock” rules (e.g., time limits and deadlines) for processing and action on local permits; and c) limits the fees that can be charged for the facilities. The FCC ruling makes no changes to the Telecommunication Act of 1996, which expressly preempts state and local government from imposing regulations that may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service. In addition, this FCC ruling expressly prohibits regulation of the placement and modification of wireless communication facilities based on radio frequency (RFR) emissions. The FCC ruling is slated to go into effect on January 15, 2019. While the recent FCC ruling is being challenged, it is uncertain if there will be a “stay” in the effective date of the order. Therefore, it is prudent for the City to address this matter as soon as possible.

**FOR CITY CLERK ONLY**

File No.: \_\_\_\_\_

Council Meeting: \_\_\_\_\_

Disposition: \_\_\_\_\_

The FCC ruling is significant in that there are several nuances in small cell wireless facilities technology and application, which set them apart from other wireless communications facilities. For this reason, staff has arranged to have Dr. Jonathan Kramer, attorney and specialist in wireless communication facility law and engineering provide the City Council with a presentation on the FCC ruling. Further, although comprehensive and effective, the City's current wireless communication facility ordinance could be updated to more fully address small cell wireless facilities located in the public right-of-way. With the assistance of Dr. Kramer and the City Attorney, staff has prepared a draft ordinance and specialized, small cell wireless facility regulations that are specific to responding to the FCC ruling (attached).

**BACKGROUND:**

**Telecommunications Act of 1996**

The Telecommunications Act of 1996 (the "1996 Act") was the first significant overhaul of telecommunications law in more than sixty years, amending the Communications Act of 1934. Signed by President Clinton, the 1996 Act represented a major change in American telecommunication law, since it was the first time that the internet was included in broadcasting and spectrum allotment. The primary goal of the 1996 Act was deregulation of the converging broadcasting and telecommunications markets and opening-up the markets to competition by removing regulatory barriers to entry. However, in addition to deregulation, one key provision allowed the FCC to preempt state or local legal requirements that act as a barrier to entry in the provision of interstate or intrastate telecommunications service. The following are three of the sections of the 1996 Act that address state and local jurisdiction preemptions:

- Section 253(a) prohibits state and local government regulations that "prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service."
- Section 704(a) expressly preempts state and local government regulation of the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency (RFR) emissions to the extent that such facilities comply with the FCC's regulations concerning such emissions. 47 U.S.C. §332(c)(7)(B)(iv).
- Section 704(a) requires a state or local government to act upon a request for authorization to place, construct, or modify personal wireless service facilities within a reasonable time frame.

Since enactment of the 1996 Act, the FCC has issued guidelines for use in evaluating environmental effects of radio frequency (RFR) emissions from cellular towers. The FCC guidelines incorporated maximum permitted exposure (MPE) limits established by the Congressionally-chartered National Council on Radiation Protection (NCRP). In addition, FCC decided to exempt certain types of towers from environmental review based on a presumption that these towers comply with the MPE limits. While the FCC was finalizing its 1996 MPE guidelines, the 1996 Act was passed. The FCC then issued the following rule consistent with the 1996 Act:

*"No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the regulations contained in this chapter concerning the environmental effects of such emissions."*

Although RFR emissions cannot be regulated at a state or local level, the federal regulations allow the state and local government to assess an individual wireless facility application to ensure that it is within the FCC standards for public exposure (MPE limits). The United States Court of Appeals for the Second

Circuit upheld the FCC guidelines setting health and safety standards on RFR emissions and prohibiting local governments from considering health effects of cellular tower radiation in zoning decisions.

Since 1996, there have been no amendments in the federal legislation or the FCC guidelines that change the status of state or local preemptions. However, the FCC has adopted specific “shot clock” regulations to implement the 1996 Act, specifying the time limits a state and local agency must act on a wireless communications facility application, namely a 90-day clock for reviewing co-location applications and a 150-day clock for reviewing siting applications other than co-locations.

### **Current Wireless Communication Facilities Ordinance**

In response to the 1996 Act, in 2001, the City Council gave direction to staff to prepare a wireless communications ordinance. A team of consultants (including legal counsel and a health consultant) was hired to assist in this effort. Following expansive research and several community workshops, a draft wireless communications ordinance was prepared based on the following goals and objectives:

- To establish development standards that regulate the design and placement of wireless communication facilities so that the visual character of the City is preserved, and to ensure the protection of the public health and safety consistent with federal law and the FCC regulations;
- To acknowledge the community benefit associated with the provision of wireless communication services; and
- To encourage the joint use of new and existing tower sites as a primary option rather than the construction of new single-use towers for this purpose.

On April 5, 2004, the City Council adopted Ordinance No. 1823 establishing wireless communications provisions in San Rafael Municipal Code (SRMC) Section 14.16.360, which can be accessed [here](#) (also included in Attachment 1). This ordinance was updated in 2014 to address mandated “shot clock” provisions setting specific deadlines and time limits for reviewing and taking action on applications for wireless communication facilities.

### ***Key Elements and Provisions of the Current Ordinance***

The following is a brief summary of the key elements and provisions of the City’s current wireless communication ordinance:

1. Applicability. The current ordinance applies to the placement of towers, antennas, and other wireless communication facilities and/or reception facilities on public and private property.
2. Review Process. Applications for all wireless communication facilities are subject to either a “ministerial review” or “discretionary review” process, which is required prior to securing building/electrical permits and installation. The ministerial review, which is a City staff-level clearance, is applicable to facilities that are “co-located” (grouped with other similar facilities on a single structure) or building-mounted (e.g., placed on a building roof or concealed in a building façade). The discretionary review requires the approval of a Zoning Administrator-level review of a Use Permit and Environmental and Design Review Permit. The discretionary review is required to new ground-mounted facilities (towers and monopoles) or significant additions to existing facilities. Public notice of the permit applications and action is required for the discretionary review, which is a notice to property owners and residents within 300 feet of the facility, or 1,000 feet if the facility includes a tower or monopole. Actions by the Zoning Administrator for the discretionary review can be appealed to the Planning Commission.

3. Fees. For the ministerial review process, a flat Telecommunication Fee of \$398.00 and an Administrative Design Review Permit fee of \$1,167.00 are charged. For discretionary review (new antenna sites), cost-recovery based fees are charged that include: a) \$2,258.00 for an Environmental and Design Review Permit, which increases to \$4,693.00 if the application requires Design Review Board review; and b) \$2,476.00 for a Use Permit.

All construction-related work in the public right-of-way is subject to an Encroachment Permit, which is processed and issued by the Public Works Department. The fee for this permit is \$246.00.

4. General Location Requirements. The code provisions note that the most desirable location of new wireless communication facilities is co-location on existing buildings and facilities. The following is the hierarchy of the general location standards:
  - a. "Preferred Locations," from most preferred to least are industrial, public/quasi-public, commercial and office zoning districts.
  - b. "Less Preferred Locations," from most preferred to least are parks, open space and residential zoning districts.
  - c. New monopoles or towers are prohibited in residential districts and designated open space and conservation areas unless supported by technical information demonstrating service need and subject to special findings.
5. Design Requirements.
  - a. Co-location is required as first priority. All new wireless communication facilities shall co-locate with existing and/or planned new wireless communication facilities, whenever feasible. Placement on light standards and utility structures (e.g., utility poles) is considered a co-location.
  - b. Stealth design is required. Stealth design requires screening or other measures to reduce the visual of the facilities so that they blend into the existing environment. One example would be a façade-mounted antenna located within an architectural feature of a building.
  - c. Ground-mounted facilities, which include antenna, equipment, cabinets must be sited to be screened from view by existing development, topography or vegetation.
  - d. Roof- and building-mounted facilities must be sited to appear as an integral part of the structure and screened by a roof parapet or concealed behind an architectural feature such a dormer, steeple or chimney.
6. Other Development Standards.
  - a. The height of a building-mounted antenna shall not exceed the height limits for the zoning district in which they are located.
  - b. Towers and support structures are subject to the setback standards for the zoning district in which they are located. Such structures are required to be located a minimum of 200 feet or at least three times the height of the structure, whichever is greater from existing residential units or vacant, residentially-zoned property.
7. Application Requirements. All Use Permit and Environmental and Design Review Permit applications for discretionary review are subject to a long list of requirements. In addition to detailed plans (site plan, design, elevations and specifications), the application must be accompanied by the following:
  - a. An RFR study to demonstrate that the proposed facility (coupled with other wireless communication facilities on "co-location" sites) is within the FCC standards for RFR emissions. The RFR study requires a "peer" review by a City-hired, qualified RF engineer. When peer review is triggered, the applicant is charged for this review.



- b. Photo simulations of the proposed facilities when proposed on sites that are highly visible from public view.
  - c. An Alternative Site Analysis is required when the proposed facility is: 1) located within any zoning district other than a commercial or industrial district; 2) located within 50 feet of a “Less Preferred Location;” 3) lacks “stealth” design; or 4) not co-located with an existing approved facility. The purpose of this analysis is for the applicant to prove and provide supporting reasons why a “Preferred Location” is infeasible and rejected, why a co-location of building-mounted location was not pursued, and why the proposed site is superior from a technical standpoint to the others considered. The City always commissions a “peer” review on all applications that include an Alternative Site Analysis.
  - d. A Noise Analysis. Facilities are typically accompanied by supported equipment such as emergency generators, which are noise-producing.
8. Post-Approval Requirements.
- a. Validation of Proper Operation. Within 45 days of commencement of operation, the applicant must submit a report indicating the actual RFR levels of the operating facility.
  - b. Five-year Review. The City is required to conduct a five-year review of the approved wireless communication facilities (discussed below). The code requires that the applicant/operator participate in the five-year review and is responsible for the cost of the City performing an RFR testing.

It is important to note that since the current ordinance applies to placing wireless communication facilities on public and private property, small cell wireless facilities placed on utility poles and street light standards in the public right-of-way are regulated under the current ordinance. Should an application for placement of small cell facilities be made today, such application would be processed and assessed per the provisions of the current ordinance. Therefore, the application would be required to be: a) reviewed for consistency with the “General Location Standards,” which prescribe that residential and open space areas be avoided (least preferred location); b) subject to submittal of an RFR report; and c) subject to the specific design standards. Placement of small cell facilities on utility poles and street light standards are: defined as “ground-mounted” facilities; and interpreted by the current ordinance as “co-location.” Therefore, the applications would qualify for the “ministerial review” process described above.

The current ordinance is not adequate to address the recent FCC ruling (discussed below) for small cell wireless facilities in the public right-of-way, which will go into effect in mid-January 2019. With this ruling, there are a number of nuances in small cell facilities technology and application, which set them apart from other wireless communications facilities. As discussed below, staff is recommending that an independent set of regulations and provisions be adopted for small cell wireless facility review and permitting.

***Inventory of Existing Wireless Communication Facilities & Required Five-Year Review***

As of October 2018, there are a total of 41 sites throughout the City that house active wireless communication facilities for nine (9) carriers.<sup>1</sup> Most of the sites are in light industrial and commercial districts; however, four sites are in residential districts (see Attachment 3 for map). All the 41 sites accommodate “co-location,” with each site housing two to four wireless communication facilities for individual carriers. The 41 sites present a variety of building-mounted, roof-mounted, and utility pole-mounted facilities; and one “mono-pine” structure.

Pursuant to SRMC Section 14.16.360, the City is required to conduct a 5-year review of all wireless facilities in the City of San Rafael. The purpose of the 5-year review is to inspect each wireless site for

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<sup>1</sup> Nine telecommunication carriers: AT&T, T-Mobile, Cingular, Nextel, Verizon, Metro PCS, Sprint, Clearwire and ExtaNet

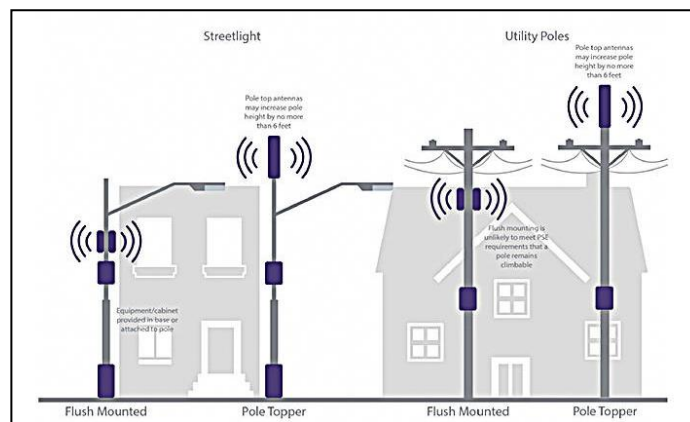
compliance with the approved Environmental and Design Review Permit and Use Permit conditions and to get an updated RFR report. The last year review was conducted in 2008. The result showed that all facilities complied with the FCC RF levels for maximum public exposure. However, of the sites surveyed, 12 were found to be out of compliance with specific approval conditions, such as required landscaping, painting of conduits or missing stealth screens. Staff contacted each carrier and was able to bring the sites into compliance.

Staff is gearing-up to begin the next 5-year review process in early 2019. We are in the process of hiring a consultant (Marv Wessell, President, Global RF Solutions) to implement to 5-year review. Mr. Wessel is currently reviewing our draft scope of work. Staff is updating our Master Wireless facility list and also gathering the approved entitlements and plans to provide to Mr. Wessel. As implemented with the 2008 review, the cost for the five-year review would be borne by the telecommunication carriers.

**Introduction of Small Cell Wireless Communication Technology**

The FCC ruling establishes parameters for both fees and aesthetic standards as well as more stringent “shot clock” regulations (see below for a more detailed discussion). The FCC ruling defines small cell wireless facilities as follows:

1. Facilities that:
  - Are mounted on structures 50 feet or less in height including the antennas;
  - Are mounted on structures no more than 10% taller than adjacent structures; or
  - Do not extend existing structures on which they are located to a height of more than 50 feet or by more than 10 percent, whichever is greater;
2. Antennas that are no more than three (3) cubic feet in volume (not including associated antenna equipment); and
3. All other wireless equipment associated with the structures is no more than twenty-eight (28) cubic feet.



Examples of small cell facility application on utility poles and light standards

To date, the City has received no applications for small cell wireless facilities to accommodate 5G technology.

**Federal Communications Commission (FCC) Ruling**

The FCC ruling clarifies and more specifically restricts the authority of state and local governments to regulate small wireless facilities in the public right-of-way. The FCC states that it has issued its ruling to

*“reduce regulatory barriers to the deployment of wireless infrastructure and to ensure that our nation remains the leader in advanced wireless services and wireless technology.”* (FCC ruling, ¶29.)

The FCC ruling ties its regulations to the 1996 Act, which prohibits in Section 253(a), local regulations that *“may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service.”* (FCC ruling, ¶15.)

The FCC ruling clarifies that an “effective prohibition” under the statute occurs where a state or local legal requirement “materially inhibits a provider’s ability to engage in any of a variety of activities related to its provision of a covered service. This test is met not only when filling a coverage gap but also when densifying a wireless network, introducing new services or otherwise improving service capabilities.” (FCC ruling, ¶37)

Notably, the FCC ruling makes no change to existing law preempting state and local government regulation of the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of RFR emissions, to the extent that such facilities comply with the FCC’s regulations concerning such emissions.

There have been numerous lawsuits filed challenging the FCC ruling. However, at present the rules set forth in the FCC order are applicable and will go into effect in mid-January 2019 unless the litigation results in a “stay,” meaning the rules are frozen through the litigation process.

The FCC ruling focuses on three substantive aspects of local regulation:

1. Limitations on Fees & Charges:

The FCC finds that state and local fees/charges associated with the deployment of wireless facilities can unlawfully prohibit the provision of service. The FCC ruling thus provides that “fees are only permitted to the extent that they are nondiscriminatory and represent a reasonable approximation of the locality’s reasonable costs.” (FCC ruling, ¶32)

The FCC ruling limits what state and local governments can charge in fees to only those deemed “fair and reasonable.” The FCC conducted a survey of 20 local jurisdictions finding that the following fee levels comply with this “fair and reasonable” standard:

- \$500.00 for non-recurring fees,<sup>2</sup> including a single, up-front application for up to five small cell wireless facility sites, with an additional \$100.00 for each additional small cell wireless facility site beyond the initial five sites.
- \$1,000.00 for non-recurring fees for a new pole to support one or more small cell wireless facility.
- \$270.00 per year for all recurring fees<sup>3</sup> including any right-of-way access fee (e.g., encroachment permit) or fee for attachment to a municipality-owned structure in the public right-of-way.

The FCC ruling states that, in limited circumstances, a state or local agency can charge fees higher than the above fees provided that: a) they are a reasonable approximation of the costs; b) the costs themselves are reasonable; and c) they are not discriminatory.

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<sup>2</sup> Non-recurring fees are akin to the fees charged for a Use Permit and Environmental and Design Review Permit

<sup>3</sup> A recurring fee would be akin to an annual fee charged for the encroachment into the public right-of-way

2. Non-fee Regulations:

The FCC ruling also addresses other types of state and local land-use or zoning requirements that may constitute an effective prohibition on the deployment of small wireless facilities, specifically focusing on aesthetics (e.g. “stealth” designs or other means of camouflage, size of equipment, colors of paint, etc.), undergrounding, and minimum spacing requirements.

These non-fee regulations must be:

- reasonable, in that they are technically feasible and reasonably directed to avoiding or remedying the intangible public harm of unsightly or out-of-character deployments;
- no more burdensome than those applied to similar infrastructure deployments. “For example, a minimum spacing requirement that has the effect of materially inhibiting wireless service would be considered an effective prohibition of service.” (FCC ruling, ¶187); and
- objective (must incorporate clearly-defined and ascertainable standards, applied in a principled manner) and published in advance.

3. Time for Action on Applications (“Shot-clock”):

The FCC ruling establishes two new time limits, so-called “shot-clocks,” within which local entities must act on small wireless facility applications, including multiple simultaneous or “batched” applications. These time limits include all aspects of the application process, such as any required pre-application meetings, permit reviews, and appeals. The new shot-clocks for small wireless facility applications are:

- 60 days: for collocations on any existing structure; and
- 90 days: for attachment of small wireless facilities to a new structure

**How are Other Marin & North Bay Cities/Towns Addressing the FCC Ruling?**

A number of Marin and Sonoma County cities/towns have responded to initial planning for small cell facilities and the FCC ruling by either adopting new regulations addressing such facilities or “doubling-up” on regulations that were already adopted. The following table presents a list of the local jurisdictions that have recently addressed this issue:

Local Jurisdiction	Adoption Date	Key Regulations & Facts
Town of San Anselmo	June 2018	Amended 1999 adopted wireless communication ordinance, adopting a separate resolution addressing small cell facilities. <ul style="list-style-type: none"> <li>• Adopted policy establishes wireless facilities located in the public right-of-way as the second-most preferred locations.</li> <li>• Requires specific design criteria for wireless facilities in the public right-of-way.</li> <li>• Requires applicant (carrier) to hold a community meeting for new installations.</li> </ul>
City of Petaluma	August 2018	Amended 1999 adopted wireless communication ordinance to address small cell facilities. Specific criteria established for placement on light standards/poles in the public right-of-way: <ul style="list-style-type: none"> <li>• Small cell facilities must be placed within the circumference and height of the existing pole.</li> <li>• Requires complete screening of the facilities and equipment must be placed underground.</li> <li>• Prohibits installation in residential districts.</li> <li>• Requires a separation between facilities of 1,500 feet from the nearest pole-mounted facility and a setback of 500 feet from a residential district.</li> </ul>
Town of Ross	August 2018	Town previously did not have an adopted wireless communication ordinance or regulations. New regulations adopted. <ul style="list-style-type: none"> <li>• Adopted regulations prohibit facilities in residential and downtown zoning district.</li> <li>• Facilities proposed in the public right-of-way subject to separate design criteria.</li> <li>• Limits height and width of facilities to a minimum necessary for property function.</li> <li>• Maximum height of 24 feet above the height of the existing utility pole and 7 feet above a street light standard.</li> <li>• Requires equipment to be placed underground.</li> </ul>
City of Mill Valley	September 2018	City introduced an urgency ordinance to expand the list of procedures and regulations previously adopted. <ul style="list-style-type: none"> <li>• Regulations now apply to both public and private property.</li> <li>• Adopted design standards similar to those adopted by the Town of Ross.</li> <li>• Prohibits wireless facilities in a residential zoning district.</li> <li>• Requires a separation between facilities of 1,500 feet from the nearest pole-mounted facility.</li> </ul>
Town of Fairfax	September 2018	Amended 1999 adopted wireless communication ordinance, adopting a separate resolution addressing small cell facilities. Adopted regulations similar to those adopted by the Town of San Anselmo.

Other jurisdictions are currently addressing this topic and responding to the FCC ruling. For example, last month the Marin County Board of Supervisors announced it will join a coalition of public entities suing the FCC in an effort to appeal its rules governing deployment of small cell wireless facilities. The lawsuit is challenging the loss of local control specific to: a) regulating small cell facilities; b) the “shot clock” provisions that mandate tight time lines for local review and action; and c) limitations on charging local permit fees for facility review and action. Some jurisdictions, like the City of Sebastopol have adopted an urgency ordinance establishing a 45-day moratorium on wireless facilities in the public right-of-way, to allow the city to prepare regulations in response to the FCC ruling.

The City of Sacramento has taken an approach that involved direct collaboration with a number of the wireless communication providers. Earlier this year, Sacramento approved the *City of Sacramento – Small Cell Design & Deployment Standards* (see Attachment 5). The standards are very specific and prescribed limiting small cell facility installations on mast arm street lights (Type 15- Caltrans), and include some separation and setback requirements. The *City of Sacramento Wireless Master Plan Update*, prepared by XG Communities, LLC (October 26, 2018) provides a roadmap on addressing small cell

facilities moving forward. The goal of the City of Sacramento is to be “prepared for the future”, in order to take advantage of a host of new and innovative technologies (driverless cars, connected health care [“telemedicine”], and public safety) using “smart infrastructure”. In Sacramento, the entire small cell wireless facility permitting process is done through their Public Works Department, and they work closely with the IT Department. The permit process is done through a “revocable license permit.” They also rely on the “Small Cell Design and Deployment Standards.” Staff has been in communication with the City of Sacramento’s Planning Division and IT Division to learn how they are handling the “5G” wireless application. Our goal is to learn from their efforts as we start the process to update our Zoning Ordinance with respect to design guidelines and permit implementation.

**ANALYSIS:**

**City’s Limitations on RFR Standards Under FCC Ruling**

As discussed above, the recent FCC ruling made no changes in the 1996 Act related to a local jurisdiction’s ability to regulate or enforce RFR limits on small cell wireless or any other wireless communication facility. Therefore, the City has no authority to approve or deny a small cell wireless facility application on the basis of health risks unless such facility exceeds the FCC standards for public exposure (MPE limits discussed above).

**Regulations and Standards for Small Cell Wireless Facilities**

To assure the City is prepared to evaluate new applications for small wireless facilities, staff has prepared a draft ordinance and special procedures and regulations (including objective aesthetic standards) for administering such facilities. The draft ordinance and special procedures and regulations (resolution) are attached (Attachments 1 and 2).

***Approaches Assessed & Considered by Staff***

The following is a summary of the approaches studied and considered by staff in consultation with Jonathan Kramer and the City Attorney’s Office:

1. Mirror the discretionary permit requirements of the current wireless communication ordinance. As discussed above, the current wireless communication ordinance (SRMC Section 14.16.360), prescribes that applications subject to discretionary review require the approval of both a Use Permit and Environmental and Design Review Permit. Staff initially considered recommending that these permits be required for small cell wireless facility installation to ensure maximum discretion by the City. However, the FCC ruling explicitly states that small cell wireless applications are allowed by-right in all zoning districts. Therefore, a Use Permit cannot be required. The Environmental and Design Review Permit can be required for assessment of aesthetics. For new pole installations and in “least preferred” locations, an Administrative Design Review Permit is recommended to accompany the Telecommunications Permit application. Pursuant to SRMC Section 14.25.060C, Administrative Design Review Permits do not require a public notice or hearing.
2. Mirror the “Alternative Site Analysis” requirements of the current wireless communications ordinance. The current wireless communication ordinance requires that an Alternative Site Analysis be prepared for applications in “Less Preferred” locations such as residential districts. This requirement places the burden of “need” on the applicant as the analysis must demonstrate that there are no other locations available to provide the same level of service coverage. Essentially, this added analysis will discourage the applicant to pursue the “Less Preferred” location. This same requirement for small cell wireless facilities was considered by staff for

applications in residential districts. However, the FCC ruling precludes the local municipality from requiring the submittal of a coverage-based analysis for small cell wireless facilities.

3. Prohibit small cell wireless facilities in residential districts. It has been advised by Jonathan Kramer and the City Attorney's office that prohibiting small cell wireless facilities in residential districts may be in violation of the FCC ruling. Therefore, an outright prohibition in the residential districts is not recommended.
4. Consider a setback requirement between a small cell wireless facility and the closest residence/residential structure or residential district. A 500-foot setback has been suggested by community residents (EMF Safety Network), which has been adopted by the City of Petaluma. Jonathan Kramer has advised that requiring a setback is problematic. As a utility, the Public Utility Commission authorizes the wireless communication carriers to have "compulsory access to the right-of-way."
5. In residential districts, limit facility installation to major arterials and minor arterials (collector streets). Staff finds that this limitation is worthy of consideration. Major and minor arterials that are in residential districts tend to be wider streets where there is a greater opportunity and success for aesthetic approaches such as strategic spacing and screening, and greater setbacks to residences. General Plan 2020 Exhibit 22 identifies major and minor arterials (see Attachment 4).
6. Impose spacing/separation requirements. The FCC ruling does not preclude the City from imposing spacing/separation requirements based on "aesthetic" considerations. However, a spacing requirement cannot be based on RFR exposure, nor can it have the effect of materially inhibiting wireless service. As discussed below, the draft procedures and regulations include a recommendation for spacing/separation requirements. A minimum 300-foot separation between small cell wireless facilities is recommended, as it provides a reasonable distance for visual transition and minimizes visual proliferation. A 1,500-3,000-foot separation has been suggested by community residents (EMF Safety Network), but this separation bears no relation to aesthetics.
7. Incentivize for complete concealment or stealth design. Staff believes that an incentive approach to encourage maximum concealment of facilities is worthy of consideration. This approach would encourage maximum concealment to permit closer spacing allowances. If not completely concealed or stealth in design, require a greater separation between facilities.
8. Consider incorporating the City of Sacramento Small Cell Design & Deployment Standards. The *City of Sacramento Small Cell Design and Deployment Standards* (Attachment 5) include some very good measures to minimize the visual impacts of small cell wireless facilities. Several of the standards are recommended by staff (discussed below and presented in Attachment 2). Recommended standards include, among others: a minimum setback from facility to the closest residence; placing antenna mountings in a concealed canister; and a spacing requirement between a new pole for wireless facilities and the existing utility pole or light standard.
9. Provide for direct appeals to the City Council. As discussed above, the FCC ruling: a) sets forth limits on permit processing deadlines and fees; and b) limits state and local discretion in the assessment of aesthetics. The processing deadlines can be extremely challenging for discretionary permit applications, especially if the action is taken at a staff level. Discretionary permits are afforded an appeal process that can be exhausted in several steps (Planning Commission review and action, followed by final review and action by the City Council). Exhausting the full appeal process can stretch-out numerous months because of noticing requirements and set meeting dates for the Planning Commission and City Council. Given the



prescribed time limits set by the FCC ruling (shot clock), all appeals of staff actions should be directly forwarded to the City Council (discussed below under proposed regulations).

***Draft Ordinance and Resolution***

As discussed above, staff recommends that the City establish a separate set of procedures and guidelines that are specific to small cell wireless facilities. The following is a summary of the draft ordinance and resolution (see Attachments 1 & 2):

1. Amend SRMC Title 14 (Zoning), Section 14.03.030 (Definitions) to add a new definition for “small wireless facility.”
2. Amend SRMC Section 14.16.360 (Wireless Communication Facilities) to specifically include small wireless facilities as part of the mix of wireless communication facilities.
3. Add new SRMC Section 14.16.361 (Small Wireless Communication Facilities). The text for this new section acknowledges that small wireless facilities in the public right-of-way are unique and subject to additional provisions and standards adopted by separate resolution of the City Council.
4. Adopt resolution setting forth policies, procedures, standards and limitations for small wireless communication facilities. The draft resolution includes the following:
  - a. The “shot clock” time limits for processing and action on an application;
  - b. Application submittal requirements to mirror the submittal requirements in SRMC Section 14.16.360.
  - c. Requirement of co-location versus installation of new poles.
  - d. Requirements for “batched” or “grouped” applications.
  - e. In residential districts, limit installation to major and minor arterials as defined by General Plan 2020 Exhibit 22 (Attachment 4).
  - f. Separation requirements between small cell installations of 300 feet. If installed on existing utility poles or light standards, waive the separation requirement if the antenna and boxes are concealed in a canister or are flush-mounted on the pole.
  - g. Dimensional and stealth design requirements.
  - h. For new installations, requirement for a separation of 300 feet to the closest existing utility pole or light standard.
  - i. A height standard requiring a clearance of equipment installation of a minimum of 10 feet from grade and a maximum height of five feet above the existing pole.
  - j. Requirement for undergrounding of associated equipment.
  - k. Limiting signage to only signage required by the FCC.
  - l. To address the shot clock limitations for application processing, requirement that all appeals be directly referred to the City Council.

As the FCC ruling will go into effect in mid-January 2019, staff is prepared to bring forward an urgency ordinance at the next, December 17, 2018 City Council meeting. With adoption of an urgency ordinance, the City will be prepared to process applications for small wireless facilities when the FCC ruling becomes effective.

As discussed above, the FCC ruling sets limits on the fees that can be charged on small cell wireless facility applications in the public right-of-way. An assessment of the City’s current fees relative to their application for small cell wireless facilities in the public right-of-way is discussed under the Fiscal Impact section of this report (below).

**Environmental Review**

Although this report is informational, it includes a draft ordinance and regulations for small cell wireless facilities that could ultimately be adopted by the City Council (see Recommended Next Steps below). The draft ordinance and regulations would be exempt from the California Environmental Quality Act (CEQA) Guidelines per Section 15061(b)(3), which excludes projects from environmental review where *“it can be of certainty that there is no possibility that the activity in question may have a significant effect on the environment.”*

Regarding environmental review for individual small cell wireless facility applications, the FCC ruling limits the local jurisdiction review of such facilities. It is expected that CEQA review for such applications would be no different than for other wireless communication applications processed by the City. For current applications, the ministerial review action is exempt from environmental review under CEQA Guidelines Section 15268. If the current applications require discretionary review, the action is typically exempt from review under CEQA Guidelines Sections 15301 (Existing Facilities) or 15303 (New Small Facilities).

**Recommended Next Steps**

As discussed above, the FCC ruling will go into effect in mid-January 2019. Therefore, it is prudent to be prepared and move forward with a local ordinance and regulations that are specifically applicable to small cell wireless facilities. It is recommended that the attached, draft urgency ordinance and accompanying resolution outlining permitting and regulations will be scheduled for the December 17, 2018 City Council meeting for consideration. Staff will continue to work on a fee study to determine if the current, non-recurring wireless communication facility fees need to be changed.

**COMMUNITY OUTREACH:**

Notice of this meeting was mailed to a list of stakeholders 15 days prior to this meeting (see Attachment 6 for meeting notice). Through the course of research on the FCC ruling and small cell technology, there have been several avenues of outreach that have been implemented. This outreach has included communications and meetings with the EMF Safety Network (network of Marin citizens/residents concerned with the health risks associated with RFR emissions), other local municipalities, Marin General Services Agency (MGSA), and the Verizon Community Engagement Team (CET). The following is a summary of this outreach:

- EMF Safety Network- Over the past several months, City staff hosted three meetings with the EMF Safety Network, Marin Education/Outreach and associated concerned residents. One of the primary concerns of the EMF Safety Network is related to electromagnetic emission from installation of wireless facilities (including small cell wireless). The meetings included a discussion of what approaches are being taken by other local municipalities. The position of the EMF Safety Network is that small cell wireless facilities designed to provide 5G technology should be prohibited in residential districts and that there be strong spacing and separation requirements. In these meetings, staff was presented a detailed presentation on the application of “fiber optics” in-lieu of wireless communications, which is an alternative approach to high speed service. Infrastructure for fiber optics is currently in-place in many areas of Marin County.

A detailed email with selected materials (suggested ordinance recommendations, articles on health risks associated with small cell/5G technology) has been prepared and submitted by the EMF Safety Network. This email and material are attached (see Attachment 7, correspondence received). This letter includes a number of recommended requirements for permitting and spacing, as well as prohibitions. As discussed above, in preparing the draft procedures and regulations, staff considered some of the suggestions that were discussed in these meetings.

- Other Local Municipalities. Planning staff research revealed that the City of Sacramento has rolled out a 5G Pilot Program as of October 1, 2018. The City has been actively working with XG Communities, a telecommunications company that has in operation since 2015. This resulted in a massive analysis of the wireless inventory and capacity needs in the City of Sacramento. The goal was to have the City be “prepared for the future”, in order to take advantage of a host of new and innovative technologies (driverless cars, connected health care (“telemedicine”), and public safety using “smart infrastructure”. Staff has been in communication with staff from the City of Sacramento’s Planning Division and IT Division to learn how they are handling the 5G wireless application. Our goal is to learn from their efforts as we start the process to update our Zoning Ordinance with respect to design guidelines and permit implementation.
  
- Marin General Services Agency. MGSA has Master License Agreements with Verizon and Mobilitie for use of street light poles within the City. Marin General Services does not expect application to begin rolling in anytime soon. However, the agreements establish a process for allowing installation subject to some limitations, including:
  - Only one carrier will be permitted per light pole except in unique situations;
  - Carriers will be required to receive approvals from local jurisdictions before installation is approved by MGSA; and
  - Carriers will need to submit construction drawings and product specifications before installation.
  
- Verizon Community Engagement Team. Staff has also been coordinating with Verizon, which has created a new “Community Engagement Team”. This new department is specifically tasked to work with both the local community and the public to answer questions about plans for small cell and 5G projects. Verizon representatives have also stated that deployment of small cell facilities is not expected anytime soon, and no specific site locations for %G application have been selected at this time. Verizon has committed to work with the City in identifying equipment that is considered suitable to the City and that can be used as a template for deployment. They noted the following:
  - Verizon is agreeable to comply with separation limits established by the City;
  - Installation on light poles will likely include antennas as well as remote radio units (RRU);
  - Verizon is interested in working with the City to identify appropriate placement;
  - Undergrounding of equipment will not be proposed by the carriers due to complexity and costs associated with undergrounding; and
  - Fiber optic cable will be needed. The facility will tap into existing cable or install new if none is available.

**FISCAL IMPACT:**

The proposed adoption of an urgency ordinance and resolution has no direct fiscal impact on the City of San Rafael. However, the fees that are charged (both non-recurring and recurring) for small cell wireless facility applications could have a fiscal impact on the City. Per the FCC ruling, the fees charged by the City for small cell wireless facilities must be fair and reasonable. The “non-recurring” fees that are presented in the FCC survey (discussed above) are below the fees that the City currently charges for both minimal review (co-location) and new antenna site facilities. However, staff finds that for now, application of our current fees are “fair and reasonable” and that they should be required for small cell wireless facilities. The current wireless communication fees are based on a 2011 Cost of Services Study, which found that: a) the Administrative Design Permit fee of \$1,167.00 represents 97% cost recovery (staff time to process and administer the application); b) the \$398.00 Telecommunication Fee represents 100% cost recovery; and c) the more significant permits for new antennas/structures (\$2,258.00/\$4,693.00 for Environmental and Design Review Permit) cover approximately 80-85% of City

staff time. The \$246.00 fee for a construction-related Encroachment Permit (“non-recurring” fee) is also 100% cost recovery. For now, staff recommends that there be no changes to the Master Fee Schedule, but staff will conduct further study to determine if the fees should be changed.

**OPTIONS:**

The City Council has the following options to consider on this matter:

1. Accept the report and direct staff to return to the City Council at the December 17, 2018 City Council meeting with an urgency ordinance and resolution.
2. Direct staff to return with more information.
3. Take no action.

**RECOMMENDED ACTION:**

Accept report and direct staff to prepare an urgency ordinance and resolution for consideration at the December 17, 2018 meeting.

**ATTACHMENTS:**

1. Suggested Amendments to San Rafael Municipal Code (SRMC) Title 14 -Zoning
2. Draft Resolution (containing regulations, standards and permitting)
3. Map of 41 existing, permitted wireless communication facilities
4. General Plan 2020 Exhibit 22- San Rafael Roadways and Arterials
5. City of Sacramento Small Cell Design & Deployment Standards
6. Public Meeting Notice
7. Correspondence received to date

ATTACHMENT 1

**Suggested Amendments to San Rafael Municipal Code (SRMC) Title 14 -Zoning**

1. **Chapter 14.03 - Definitions** Amend the list of definitions in Section 14.03.030 by amending and inserting new definitions, as shown below by ~~strikethroughs~~ for deletions and **underline/italics** for insertions, in alphabetical order, as follows:

14.03.030 - Definitions.

"Small Wireless Facility" means a small wireless facility as defined by the FCC and that meets the following requirements:

1. Meet one of the following mounting requirements:
  - a. are mounted on structures 50 feet or less in height including their antennas as defined in section 1.1320(d), or
  - b. are mounted on structures no more than 10 percent taller than other adjacent structures, or
  - c. do not extend existing structures on which they are located to a height of more than 50 feet or by more than 10 percent, whichever is greater;
2. Each antenna associated with the deployment, excluding associated antenna equipment (as defined in the definition of antenna in section 1.1320(d)), is no more than three cubic feet in volume;
3. All other wireless equipment associated with the structure, including the wireless equipment associated with the antenna and any pre-existing associated equipment on the structure, is no more than 28 cubic feet in volume

Antenna equipment, means equipment, switches, wiring, cabling, power sources, shelters or cabinets associated with an antenna, located at the same fixed location as the antenna, and, when collocated on a structure, is mounted or installed at the same time as such antenna.

"Wireless communication facilities" means facilities regulated by the FCC that transmit and/or receive electromagnetic signals for cellular technology, personal communication services, enhanced specialized mobile services, paging systems, and radio and television broadcast transmission facilities. Facilities include antennas, microwave dishes, parabolic antennas, and all other types of equipment (but does not include small wireless facility, which is defined separately under "Small Cell Wireless Facility") used in the transmission or reception of such signals; telecommunication towers or similar structures supporting said equipment; associated equipment cabinets and/or buildings; and all other accessory development. These facilities include amateur radio antenna structures that exceed thirty feet (30') in height but do not include government-operated public safety networks.

**2. Chapter 14.16 (Site and Use Regulations)**

**Add Section 14.16.361 (Small wireless communications facilities) in its entirety as noted below by underline/italics:**

14.16.361 – Small wireless communication facilities.

## ATTACHMENT 1

- A. Purpose. This section establishes procedural requirements and standards to regulate the streamlined review of small wireless communications facilities (as defined in section 14.03.030 of Chapter) within the public right-of-way or on public and private property to minimize the potential safety and aesthetic impacts on neighboring property owners and the community, and to comply with applicable state and federal regulations. To fulfill this purpose, all small wireless facilities shall be reviewed in compliance with Policy Resolution adopted by City Council and as may be revised.

### **3. Chapter 14.16 (Site and Use Regulations)**

**Amend Section 14.16.360 (Wireless Communications Facilities) as shown below by ~~strikethroughs~~ for deletions and underline/italics for insertions:**

14.16.360 - Wireless communication facilities.

- A. Purpose. This section establishes standards to regulate the design and placement of towers, antennas, and other wireless communication transmission and/or reception facilities (hereinafter called wireless communication facilities) on public and private property, including facilities within the public right-of-way to minimize the potential safety and aesthetic impacts on neighboring property owners and the community, and to comply with applicable state and federal laws, including the Federal Telecommunications Act of 1996. This section does not apply to small cell wireless facilities as defined under Section 14.03.030, which are regulated by Section 14.16.361. To fulfill this its purpose, this section is intended to:
1. Establish review and approval requirements, application submittal requirements, and development standards to regulate the design and placement of wireless communication facilities so as to preserve the visual character of the city and to ensure public health and safety, consistent with federal law and Federal Communications Commission (FCC) regulations.
  2. Acknowledge the community benefit associated with the provision of wireless communication services within the city.
  3. Encourage the joint use of new and existing ground mounted facility monopole/tower sites as a primary option rather than construction of additional single-use towers.
  4. Allow the community development director, or delegated staff, to make certain determinations under the provisions of this section.
- B. Zoning Review Required.
1. Ministerial Review. A staff level ministerial review shall be required and obtained from the community development director, and no discretionary use permit or environmental design review planning permits shall be required, for the following types of wireless communications facilities to assure compliance with the requirements of subsections G, H, I, J, K, L and M of this section:
    - a. Co-located facilities on an existing approved monopole or tower structure (i.e., ground mounted facility) that utilizes or improves stealth design characteristics of the facility, and/or does not substantially increase the visible height or overall dimensions of the structure and/or ground lease area. The alteration or addition shall not significantly change the appearance of the existing facility or its stealth design features, or increase visual height, overall dimensions, or ground lease area by more than ten percent (10%).

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- b. Building-mounted facilities, including modification to existing permitted facilities that are architecturally compatible with and entirely integrated into the existing building façade (i.e., stealth design). In general, to be deemed architecturally compatible and entirely integrated with the building façade, the modification shall utilize or improve existing roof-top screening solutions, shall not increase the building height, and shall be flush with and designed to blend into the existing building walls or facades.
  - c. Ministerial review shall not apply to modifications of monopoles or towers, new building additions, extensions, projections, etc. made to existing facilities which the community development director determines would increase the visual impacts of the facility. This shall include extensions to height of a facility that exceeds the height limits of the base zoning district. In such instances, an environmental and design review permit shall be required for the stealth design modifications pursuant to the provisions of Chapter 14.25.
2. Discretionary Review. A zoning administrator level use permit and an environmental and design review permit shall be required for the following wireless communication facilities pursuant to the requirements of Chapter 14.22, Use Permits, and Chapter 14.25, Environmental and Design Review Permits, consistent with the provisions of this section:
- a. New ground-mounted facilities (towers and monopoles) or significant additions proposed to existing facilities that would increase its visual height, overall dimensions and/or lease area (e.g., more than ten-percent increase in the existing permitted height, overall dimension, lease area); ~~and~~
  - b. Any facility which in conjunction with existing facilities in the area, exceeds the Federal Communications Commission (FCC) standards for public exposure for radio frequency radiation (RFR) emissions.
  - c. The community development director may determine that minor modifications to an existing facility shall be subject to an administrative level design review. In general, to be deemed a minor modification, the alteration or addition shall not significantly change the appearance of the existing facility or its stealth design, or increase visual height, overall dimensions, or ground lease area by more than ten percent (10%).
  - d. The community development director may elevate the project for review and action by the planning commission or refer a project to the design review board for its recommendation, as determined necessary to assure that appropriate stealth designs are being proposed to the maximum extent practicable, that the facility location is suitable, that development appropriately responds to its setting, and that the requirements of this section are substantially addressed.
- C. Appeals. All discretionary decisions of the community development director, zoning administrator, or the planning commission may be appealed in accordance with the provisions of Chapter 14.28, Appeals.
- D. Application Requirements. Applications for a use permit and/or an environmental and design review permit shall be initiated by submitting all of the following information and any revised application materials in the manner prescribed:
1. A completed application form, signed by the property owner or accompanied by a letter of authorization that states the property owner has read and agrees to the filing of the application as well as the specific conditions of application cited on the application



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form, and accompanied by the required fee. Application procedures and processing timeframes shall be in accordance with state law requirements and the procedural guidelines established by the community development director.

2. Peer Review. Prior to accepting an application as complete, the city may require at its sole discretion that a peer review of the project be conducted by a qualified RF engineering consultant, as deemed necessary to confirm the adequacy of the RFR study and/or the technical design requirements of the facility. The consultant shall be selected by the city and paid for by the project applicant. Peer review is typically required for new ground-mounted monopole or tower facilities, building mounted facilities lacking stealth design, facilities proposed within the less-preferred residential and open space areas, or RFR studies that are deemed to warrant further review.
3. Submittal/Re-submittal Meeting Required. Applications for a wireless antenna facility must be made in person during the community development department, planning division public counter hours. A pre-submittal meeting is encouraged, and a re-submittal meeting shall be required. Applications and any subsequent resubmittals that are not made in person and during scheduled times shall not be deemed accepted for filing and will be returned.
4. Pre-application or Conceptual Review. A pre-application and/or conceptual review are strongly recommended prior to submitting formal applications for new ground-mounted monopoles or towers, new building mounted facilities or projects in less-preferred residential and open space areas.
5. Revised applications. Unless waived by the community development director, resubmitted applications that result in a substantially revised facility design, size, height or location such that a new round of completeness review is warranted, shall be required to be withdrawn and a new application shall be filed for the substantially revised project.
6. Extensions of time. Applications deemed incomplete must be resubmitted within 30 days or they shall be deemed automatically withdrawn, unless the applicant has requested a one-time extension in processing time to resubmit, not to exceed 90 days. If the application is deemed automatically withdrawn, a new application shall be required in order to proceed with the project.
7. Six (6) initial sets of materials and plans showing the following information:
  - a. Project Description. A complete project description, including the following information on the proposed wireless communication facility:
    - i. Number and sizes of antennas and approximate orientation,
    - ii. Other technical information regarding transmission equipment such as maximum power output and frequencies,
    - iii. Copy of FCC license,
    - iv. Heights of proposed facilities,
    - v. Equipment enclosure type and size,
    - vi. Materials and colors of antennas and any equipment enclosure,
    - vii. Description of towers or other structures necessary to support the proposed facilities, and
    - viii. Description of lighting, signage and landscaping proposed.

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- b. Site Plan(s). A site plan, showing the overall property on which the facility will be placed, and a detail site plan for the project area, as needed for large sites, provided on a twenty-four-inch-by-thirty-six-inch (24" x 36") sheet of paper and an eleven-inch-by-seventeen-inch (11" x 17") reduction, and including the following information:
    - i. Vicinity map,
    - ii. Parcel lines of the subject parcel,
    - iii. Contextual map showing structures on adjacent properties,
    - iv. Location and names of adjacent streets and drives proposed to serve as access to the facility,
    - v. Topography of the subject parcel and location of any drainages within or adjacent to the site,
    - vi. Location of all existing buildings, structures, utilities, parking areas, significant trees and other natural forms, or other features which might affect the proposed use of the property,
    - vii. Setbacks of proposed structures and improvements from the property lines,
    - viii. Location and height of required cuts and fills for the grading of land and any retaining walls proposed,
    - ix. Location of proposed development including all towers, structures, buildings, utility line extensions, driveways or roads, and parking areas,
    - x. Schematic drainage and grading plan, and
    - xi. North arrow, graphic scale, the applicant's name, assessor's parcel number and date prepared.
  - c. Elevations. Elevations showing all sides of the proposed facility set forth on a twenty-four-inch-by-thirty-six-inch (24" x 36") sheet of paper, and an eleven-inch-by-seventeen-inch (11" x 17") reduction, including the following information:
    - i. Elevations and sections of the site displaying site topography, proposed facilities including towers, equipment shelter and existing buildings,
    - ii. Wall, roof, tower and antenna materials,
    - iii. Fencing, air conditioning units and outdoor lighting, if any,
    - iv. Rooftop or building features such as vents, chimneys and antennas, and
    - v. Building or tower height as measured from natural grade.
  - d. Photo-Simulations. Photo-simulations of the proposed facility from key public viewpoints based upon consultation with city staff. Photo-simulations shall display existing and proposed views in an eleven-inch-by-seventeen-inch (11" x 17"), or larger, format, with the dates shown when the base photo was taken.
  - e. Landscape Plan. A landscape and irrigation plan, showing all existing and proposed improvements, location of proposed plantings and type of landscape material, for proposed ground-mounted facilities including equipment cabinets.
8. Alternative Site Analysis. An alternative site analysis is required if the proposed facility is:

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- a. Located within any district other than a commercial or industrial district;
- b. Located within fifty feet (50') of a "Less Preferred Location," as defined in subsection (G)(2) of this section (i.e., parks, open space or residential zoning district);
- c. Lacking stealth design; or
- d. Not co-located with an existing approved facility.

The alternative site analysis shall be presented in a narrative form with supporting maps and other graphics that identify the other site locations considered and rejected in favor of the proposed site. The applicant shall provide supporting reasons why the alternate sites were infeasible and rejected, why co-location or building-mounted location has not been pursued (if applicable), and why the proposed site is superior from a technical or other standpoint to the others considered.

9. Future Co-Location. For new ground-mounted towers or monopoles, a signed statement that the carrier, or its future successors, will cooperate with the city to allow future co-location of antennas at the proposed site if it is approved and that the carrier has reviewed and agrees to comply with all post-approval requirements of this section.
10. Story Poles. Story poles or mock-ups may be required if deemed necessary by the community development director.
11. Radio Frequency Radiation (RFR) Study and FCC Compliance Details. For the sole purpose of verifying compliance with the FCC radio frequency emission standards, an emissions report which measures the predicted and actual levels of electromagnetic field radiation emitted by the proposed facility operating alone and in combination with radiation emitted from other existing or approved facilities that can be detected at the proposed facility site. Radiation measurements shall be based on all proposed (applications filed and pending), approved, and existing facilities operating at maximum power densities and frequencies. The study shall identify the existing and predicted electromagnetic field radiation in table form, identify any measures required to comply with the FCC standards for predicted exposure levels, provide a summary of the conclusions of the report and provide details for any signage, barriers or similar mitigation that is recommended or required. If mitigation is required, the details for signage, barriers or other physical improvements shall also be included on the project plans prepared for the facility. It is the responsibility of the applicant to determine the location and power of existing facilities.
12. Noise Analysis. A noise analysis for emergency generators or other noise-producing facilities.

Applications accepted as complete. Once an application has been accepted as complete, it shall be promptly scheduled for hearings, and a decision shall be made based upon the quality of the information presented by the applicant.

- E. Exemptions. The following types of facilities are exempt from the provisions of this section:
  1. Facilities for which zoning permit applications were approved by the city and/or building permits were issued on or prior to the effective date of this section and which remain valid (i.e., not expired) shall be exempt from the review and approval requirements of this section, except for the requirements for validation of proper operation, monitoring, and removal of abandoned facilities, and for proposed modifications to existing facilities which shall remain applicable;

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2. Facilities owned and operated by public agencies; and
  3. Proposed facilities that would be located entirely within a building and only serve that building.
- F. Public Notice. Notice of a public meeting or hearing for a wireless communication facility subject to a use permit and/or environmental and design review permit shall be given in accordance with Chapter 14.29, Public Notice, except that a public notice shall be mailed to all property owners within one thousand feet (1,000') of any proposed facility that includes a tower or monopole. Public hearing and notice shall not be required for minor modifications made to existing facilities that the community development director determines, pursuant to the provisions of Section 14.16.360.B.3, would require only an administrative level environmental and design review permit.
- G. General Location Standards. The most desirable location for new wireless communication facilities is co-location on existing facilities or buildings. All wireless communication facilities shall be sited to avoid or minimize land use conflicts in compliance with the following standards:
1. Preferred Locations. The following list of preferred locations for wireless communication facilities is in order of preference from most to least preferred: Industrial, public or quasi-public, commercial and office zoning districts are the preferred locations.
  2. Less Preferred Locations. The following less preferred locations are listed in order of preference from most to least preferred: Parks or open space and residential zoning districts.
  3. Avoid Residential and Open Space Areas. New monopoles or towers shall not be located within residential, designated open space or conservation areas unless sufficient technical and other information is provided to demonstrate to the satisfaction of the planning commission or zoning administrator that location in such areas is appropriate, subject to the following findings:
    - a. The location of the proposed facility site is essential to meet the service demands of the carrier and no other alternative co-location, existing development or utility facility site, or type of antenna support structure is feasible. This shall be documented by the applicant providing a list of the locations of preferred technically feasible sites, the good faith efforts and measures taken by the applicant to secure these preferred sites, and the specific reasons why these efforts and measures were unsuccessful.
    - b. The use of a monopole for the proposed facility by itself or in combination with other existing, approved, and proposed facilities will avoid or minimize adverse effects related to land use compatibility, visual resources and public safety.
  4. Avoid Significant Buildings and View Sheds. Wireless communication facilities shall not be located on historically or architecturally significant structures unless visually and architecturally integrated with the structure and shall not interfere with prominent vistas or significant public view corridors.
- H. Design Requirements.
1. Co-Location. All new wireless communication facilities service providers shall co-locate with other existing and/or planned new wireless communication facilities whenever feasible. Service providers are encouraged to co-locate with other existing facilities such as water tanks, light standards and other utility structures where the co-location is

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found to minimize the overall visual impact of the new facility. Co-location of small cell wireless facilities on light standards/poles, traffic lights, or other structures located within the public right-of-way shall be subject to requirements of Section 14.16.361.

2. **Stealth Design.** All wireless communication facilities shall have a stealth design to screen or reduce visual impacts and blend the facility into the existing environment. Examples of stealth design are facade-mounted antennas located within architectural features, so they are screened from view, or an antenna design that mimics architectural features so they appear to be architecturally integrated as a part of the building design, or facilities with colors and materials to minimize visibility such as a non-reflective finish in a color compatible with the surrounding area. Stealth tower, monopole or building design should seamlessly integrate with its setting and/or building façade. A seamless integration would include façade mounted facilities that are flush with the existing building wall or window plane and that are finished to match the existing textures and finishes, or a high-quality faux tree or similar monopole/tower design that would match existing surrounding vegetation or site characteristics. Referral to the design review board may be required to confirm whether a particular design solution would clearly integrate into an existing building or site and meet the intent of stealth design.
3. **Ground-Mounted Facilities.** All new ground-mounted wireless communication equipment, antennas, poles, dishes, cabinet structures, towers or other appurtenances shall be:
  - a. Co-located on existing structures to the extent feasible. Co-location is preferred over new monopoles or other towers erected specifically to support wireless communication facilities unless technical evidence demonstrates that there are no other alternative sites or feasible support structures, or the use of a monopole or tower would avoid or minimize adverse effects related to the view shed, land use compatibility, visual resources and public safety.
  - b. Sited to be screened by existing development, topography or vegetation to the extent consistent with proper operation of the wireless communication facility. Additional new, irrigated vegetation, or other screening, may be required as a condition of approval.
  - c. Designed using high-quality techniques to minimum surrounding vegetation or features in order to blend into the site to the maximum extent practicable.
4. **Roof and Building-Mounted Facilities.** Roof and building-mounted antennas and equipment shall be:
  - a. Sited and designed to appear as an integral part of the structure or otherwise minimize their appearance. Placing roof-mounted antennas in direct line with significant view corridors shall be avoided. Where appropriate, construction of a rooftop parapet wall to hide the facility may be required.
  - b. Integrated architecturally with the design, color, materials and character of the structure or otherwise made as unobtrusive as possible. If possible, antennas shall be located entirely within an existing or newly-created architectural feature (e.g., cupolas, dormers, chimneys or steeples) so as to be completely screened from view. To the extent feasible, building-mounted antennas shall not be located on the front, or most prominent facade of a structure, and shall be located above the pedestrian line-of-sight.

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- c. Whenever possible, base stations, equipment cabinets, back-up generators, and other equipment associated with building-mounted antennas shall be installed within the existing building or underground. If this is not feasible, the equipment shall be painted, screened, fenced, landscaped or otherwise treated architecturally to minimize its appearance from off-site locations and to visually blend with the surrounding natural and built environment.
  5. Signage. No advertising signage or identifying logos shall be displayed on any wireless communication facility except for small identification plates used for emergency notification and legally required hazard warnings.
  6. Waiver Request. A waiver from these requirements may be requested if the applicant can show, by substantial evidence, that compliance with a particular requirement is technologically infeasible or would result in an unreasonable interference with signal quality. The applicant will be required to prove that there are no feasible alternatives to the waiver request. A waiver request may be subject to peer review conducted by a qualified RF engineering consultant selected by the city and paid for by the project applicant.
- I. Development Standards.
1. Height. The maximum height of building-mounted antennas shall be in compliance with the height limitations for the zoning district in which they are located. An exception to antenna height may be granted by the planning commission or zoning administrator if the RFR exposures and aesthetic quality of the proposed facility are found to be acceptable. Antenna structures, including towers and monopoles, and mechanical screening features related to wireless communication facilities, shall be regulated subject to Section 14.16.120 of this chapter.
  2. Setbacks.
    - a. Towers, guy wires, and accessory structures, including equipment cabinets, shall comply with the setback requirements of the applicable zoning district. Towers and support structures shall be located a minimum of two hundred feet (200') or at least three (3) times the height of the tower, whichever is greater, from existing residential units or vacant residentially zoned property.
    - b. Building-mounted facilities may be permitted to extend up to two feet (2') horizontally beyond the edge of the structure regardless of setback requirements through the application review process, provided that the antenna does not encroach over an adjoining parcel or public right-of-way or otherwise create a safety hazard.
- J. Lighting. Any exterior lighting shall be manually operated, low wattage, and used only during night maintenance or emergencies, unless otherwise required by applicable federal law or FCC rules. The lighting shall be constructed or located so that only the intended area is illuminated, and off-site glare is fully controlled.
- K. Landscaping. Wireless communication facilities shall be installed in a manner that maintains and enhances existing vegetation and provides new landscape material to screen proposed facilities through the following measures:
1. The emphasis of the landscape design shall be to visually screen the proposed facility and stabilize soils on sloping sites. Introduced vegetation shall be native, drought tolerant species compatible with the predominant natural setting of the adjacent area.

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2. Existing trees and other screening vegetation in the vicinity of the proposed facility shall be protected from damage both during and after construction. Submission of a tree protection plan prepared by a certified arborist may be required.
  3. All vegetation disturbed during project construction shall be replanted with compatible vegetation and soils disturbed by development shall be reseeded to control erosion.
  4. Appropriate provisions for irrigation and maintenance shall be identified in the landscape plan. The city may impose a requirement for a landscape maintenance agreement as a condition of approval.
- L. Noise. Wireless communication facilities shall be constructed and operated in a manner that minimizes noise. Noise reduction shall be accomplished through the following measures:
1. Wireless communication facilities shall operate in compliance with the noise exposure standards in San Rafael Municipal Code Chapter 8.13, Noise.
  2. Normal testing and maintenance activities shall occur between eight a.m. (8:00 a.m.) and six p.m. (6:00 p.m.), Monday through Friday, excluding emergency repairs.
  3. Backup generators shall comply with the same noise standards referenced in subsection (L)(1) of this section and shall only be operated during power outages, emergency occurrences, or for testing and maintenance.
- M. Radio Frequency Radiation (RFR).
1. RFR Standards. Wireless communication facilities operating alone and in conjunction with other telecommunication facilities shall not produce RFR in excess of the standards for permissible human exposure as adopted by the FCC.
  2. RFR Report. Applications for wireless communication facilities shall include a RFR report, prepared by a qualified expert, which identifies the predicted and actual (if available) levels of RFR emitted by the proposed facility operating by itself and in combination with other existing or approved facilities which can be measured at the proposed facility site. Measurements for RFR shall be based on all proposed, approved, and existing facilities operating at maximum power densities and frequencies.
- N. Post-Approval Requirements.
1. Validation of Proper Operation. Within forty-five (45) days of commencement of operations, the applicant for the wireless communication facility shall provide the community development department with a report, prepared by a qualified expert, indicating that the actual RFR levels of the operating facility, measured at the property line or nearest point of public access and in the direction of maximum radiation from each antenna, is in compliance with the standards established by the FCC for RFR.
  2. Five-Year Review. The owner or operator of a wireless communications facility shall participate in the measurement by the city of the RFR of the facility, which shall be conducted on a five (5) year cycle. The requirement for a five-year review shall be made a condition of approval for all wireless communication facilities. The city will contract to perform the testing with a qualified expert and the owners or operators shall bear the proportionate cost of testing for its facility. The city will establish procedures for:
    - a. Scheduling the five-year review period;
    - b. Hiring an expert to perform RFR testing;



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- c. Collecting reasonable fees; and
  - d. Enforcement actions for nonpayment of fees.
3. Notification of Abandonment of Use. The owner or operator of an approved wireless communication facility shall remove any abandoned facilities or restore the existing approved use of a facility within ninety (90) days of termination of use.
  4. Changes Affecting RFR. Any operational or technological changes to an approved wireless communication facility affecting RFR exposures shall be reported promptly to the city, including any change of ownership. The city may require new RFR testing within forty-five (45) days of notification.
  5. Changes to FCC Standards. Owner or operators of all approved wireless communication facilities shall make necessary changes or upgrades to their facilities in order to comply with any newly adopted FCC standards for RFR. Upgrades to facilities shall be made no later than ninety (90) days after notification of the changed FCC standards and the owner or operator shall notify the city in writing that the upgrades have been completed.
  6. Co-Location and Facility Upgrade Agreement. Owners or operators of all approved wireless communications facilities shall agree to make their facility available for co-location with other carriers. Modifications to the facility design shall be allowed to accommodate additional carriers on a site, as well as to restore, replace, or upgrade any screening that is deemed obsolete and removed as a result of modifications made to the primary site structure, or concurrent with any upgrades proposed to the subject facility.
  7. Owners or operators of all approved wireless communications facilities shall be responsible for maintaining the effectiveness of screening of its facilities, in compliance with project approvals. This shall include pursuing modifications of existing approvals, as necessary, should changes be made to the site or primary structure that would reduce the effectiveness of screening provided for the facility.
- N. Definitions.
1. "Ground Mounted Facility" means a monopole, tower or any structure built for the sole or primary purpose of supporting FCC-licensed wireless communications facility antenna and their associated facilities. Wireless antenna facilities and equipment that are mounted onto an existing structure, including existing utility poles, on private property shall be considered building mounted co-located on an existing structure. Mounting of wireless facilities on light standards/poles, traffic lights, or utility poles within the public right-of-way shall be governed by Section 14.16.361.
  2. "Base station" consists of "radio transceivers, antennas, coaxial cable, a regular and backup power supply, and other associated electronics.
  3. "Lease area" means the defined area on the ground or on a building in which wireless facility equipment is placed and/or enclosed.

**ATTACHMENT 2**

**RESOLUTION NO. \_\_\_\_\_**

**RESOLUTION OF THE SAN RAFAEL CITY COUNCIL ADOPTING POLICIES,  
PROCEDURES, STANDARDS AND LIMITATIONS FOR SUBMITTAL AND REVIEW OF  
SMALL WIRELESS COMMUNICATION FACILITIES WITHIN THE PUBLIC RIGHT-OF-  
WAY AS SET FORTH IN THE SAN RAFAEL MUNICIPAL CODE SECTION 14.16.361**

**WHEREAS**, on September 26, 2018, the Federal Communications Commission (FCC) adopted regulations pertaining to small wireless facilities setting forth limitations on state and local government regulation of small cell wireless facilities that are placed on utility poles and street light standards located in the public right-of-way; and

**WHEREAS**, the FCC ruling: a) limits the level of local permitting and discretion; b) establishes “shot clock” rules (e.g., time limits and deadlines) for processing and action on local permits; and c) limits the fees that can be charged for the facilities; and

**WHEREAS**, the FCC ruling further established that any aesthetic regulations and fees required for processing of small wireless facilities be published in advance.

**NOW, THEREFORE, BE IT RESOLVED**, that the City Council hereby adopts the following Policies, Procedures, Standards, and Limitations for submittal and review of Small Cell Wireless Facilities within the public right-of-way:

**A. Purpose.**

This Policy Resolution establishes procedural requirements and standards to regulate the streamlined review of small wireless communications facilities within the public right-of-way or on public and private property to minimize the potential safety and aesthetic impacts on neighboring property owners and the community, and to comply with applicable state and federal laws. To fulfill this purpose, all small wireless facilities shall be reviewed in compliance with this Policy Resolution adopted by City Council and as may be revised.

**B. Definition**

“*Small Wireless Facility*” means a small wireless facility as defined by the FCC and that meets the following requirements:

1. Meet one of the following mounting requirements:
  - a. are mounted on structures 50 feet or less in height including their antennas, or
  - b. are mounted on structures no more than 10 percent taller than other adjacent structures, or
  - c. do not extend existing structures on which they are located to a height of more than 50 feet or by more than 10 percent, whichever is greater;
2. Each antenna associated with the deployment, excluding associated antenna equipment, is no more than three cubic feet in volume;
3. All other wireless equipment associated with the structure, including the wireless equipment associated with the antenna and any pre-existing associated equipment on the structure, is no more than 28 cubic feet in volume

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“*Antenna equipment*” means equipment, switches, wiring, cabling, power sources, shelters or cabinets associated with an antenna, located at the same fixed location as the antenna, and, when collocated on a structure, is mounted or installed at the same time as such antenna.

“*Pole*” means a single shaft of wood, steel concrete, or other material capable of supporting any equipment which is mounted thereon.

**C. Applicability**

This Policy Document applies to all small wireless facilities as defined above, proposed within the public right-of-way.

**D. Application Requirements**

Applications for a Small Wireless Facilities shall be in one of the following ways:

<b>Type of Installation</b>	<b>Type of Application</b>
Co-location in a preferred location	Telecommunication Application
Installation of a New Pole	Telecommunication Application Environmental and Design Review Application
Any Installation in a Least Preferred Location	Telecommunications permit Application Environmental and Design Review Application

In addition, an encroachment permit shall be required for all work within the public right-of-way. Submittal requirements for small wireless facilities shall be the same as required for submittal of other wireless communications facilities outlined under section 14.16.360. In addition, applications for small wireless facilities shall demonstrate compliance with Section H. *Design Requirements and Limitations* outlined below.

**E. REVIEW AUTHORITY AND APPEALS**

The Planning Division shall have review authority over applications for Environmental and Design Review for small wireless facilities. No notification or public hearing is required pursuant to SRMC Section 14.25.060C (Administrative Design Review). The Planning Division’s decision on such applications shall be subject to appeal directly to the City Council.

The Department of Public Works shall have review authority over encroachment permits within he public right-of-way.

**F. REQUIREMENTS FOR BATCHED PERMITS**

An Applicant may submit batched applications. Batched applications include:

1. Simultaneous submittal of not more than Ten (10) applications for small wireless communications Facilities, or
2. A single, consolidated application covering no more than ten (10) small wireless communications facilities locations, provided that the proposed communications facilities are to be deployed to include all of the following:
  - a. on the same type of structure;
  - b. within the same linear alignment; and
  - c. using the same or similar equipment;

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**G. Application Fees**

Applications for small wireless facilities shall include the following fees:

<b>Type of Installation</b>	<b>Fee</b>	<b>Fee Description</b>
Co-location in preferred location	\$ 398.00	Telecommunication fee
	\$ 246.00	Encroachment Permit
Installation of New Pole	\$ 398.00	Telecommunication fee
	\$ 1167.00	Environmental and Design Review Fee
	\$ 246.00	Encroachment Permit
Installation in least preferred location	\$ 398.00	Telecommunication fee
	\$ 1,167.00	Environmental and Design Review Fee
	\$ 246.00	Encroachment Permit

**H. Zoning Review Required.**

New small wireless facilities shall be processed within the time periods established by the FCC as follows:

Review of applications to collocate a small wireless facility using an existing pole: 60 Days

Review of applications to deploy a small wireless facility using a new pole: 90 Days

**I. Design Requirements and Limitations**

Co-Location	Co-location on an existing structure is encouraged as long as other aesthetic and structural requirements can be complied with.
Preferred Locations	Installation of small wireless antenna with the public right-of-way shall be located in the preferred locations listed below in ordered by preference: <ul style="list-style-type: none"> <li>▪ Adjacent to commercial, industrial and public quasi-public districts</li> </ul>
Less Preferred Locations	Installation of small wireless antenna with the public right-of-way may be located in the less preferred locations listed below: <ul style="list-style-type: none"> <li>▪ Right-of-ways adjacent to residential districts- permitted only on streets identified as Arterial and Minor Arterial streets under the General Plan 2020 Exhibit 22.</li> </ul>
Least Preferred Locations	Except as noted above, installation of small wireless antenna within the public right-of-way adjacent to residential districts should be avoided.
Installation on traffic signals	Not Permitted
Installation on existing poles within the right-of-way	<ul style="list-style-type: none"> <li>▪ Installation on existing or new pole shall consist of antenna and radio relay units (rru) only.</li> <li>▪ Separation requirements-</li> </ul> There no separation requirements for installation of small wireless

**ATTACHMENT 2**

	<p>antennas that meet the following criteria:</p> <ul style="list-style-type: none"> <li>- Antenna shall be in a concealed canister located on the top of pole</li> <li>- The canister shall not exceed the width of the existing pole by more than 6 inches</li> <li>- associated cables and wires shall be concealed/ flush mounted</li> <li>- other associated equipment shall be installed underground or</li> </ul> <p>All other types of antenna used on top of or extending from pole (e.g., rectangular box, panel), the minimum separation requirement shall be 300 feet. All associated cables and wires shall be concealed or flush mounted.</p>
Installation of new poles within the right-of-way	<p>New poles shall be located no closer than 300 feet from an existing utility pole or light pole and shall meet the following criteria</p> <ul style="list-style-type: none"> <li>- Antenna shall be in a concealed canister located on the top of pole</li> <li>- The canister shall not exceed the width of the existing pole by more than 6 inches</li> <li>- associated cables and wires shall be concealed/ flush mounted</li> </ul>
Installation of associated equipment	<p>Equipment associated with the small cell wireless facility shall be undergrounded or screened from public view. Equipment and/or screening shall not interfere with pedestrian path of travel line of sight</p>
Undergrounding	<p>See above</p>
Lighting	<p>New pole installations proposals shall include existing and proposed lighting and electrical infrastructure and shall be design such that uniform distribution of light is achieved.</p>
Signage:	<p>Signage is not permitted except to comply with FCC regulations to provide safety warnings.</p>
Dimension limits:	<p>Small wireless facilities shall not exceed the width of an existing structure.</p>
Height limits:	<p>Pole mounted antennas shall comply with the following height limits:</p> <ul style="list-style-type: none"> <li>▪ minimum height of 10 feet from sidewalk</li> <li>▪ maximum height of 5 feet above existing pole</li> </ul>
ADA requirements:	<p>Installation on poles that violate any ADA access requirements shall not be allowed.</p>
Screening of antennas:	<p>See installation limits on poles above</p>
Noise:	<p>Wireless communication facilities shall be constructed and operated in a manner that minimizes noise. Noise reduction shall be as required under Zoning Code Section 14.16.360</p>
Post-Approval Requirements. forty-five (45) days review	<p>Post-approval requirements shall be as required under Zoning Code Section 14.16.360.</p>

**ATTACHMENT 2**

Five-Year Review:	
Radio Frequency Radiation (RFR):	RFR Standards. Small wireless facilities operating alone and in conjunction with other telecommunication facilities shall not produce RFR in excess of the standards for permissible human exposure as adopted by the FCC. Applications shall include RFR report consistent with Zoning Code Seciton 14.16.360

**BE IT FURTHER RESOLVED** that any and all amendments to the Small Cell Wireless policies, procedures, standards and limitations, as deemed necessary from time-to-time shall be adopted by resolution of the City Council.

I, Lindsay Lara, Clerk of the City of San Rafael, hereby certify that the forgoing resolution was adopted as a regular meeting of the City Council on the \_\_\_\_\_ day of December 2018.

AYES:

NOES:

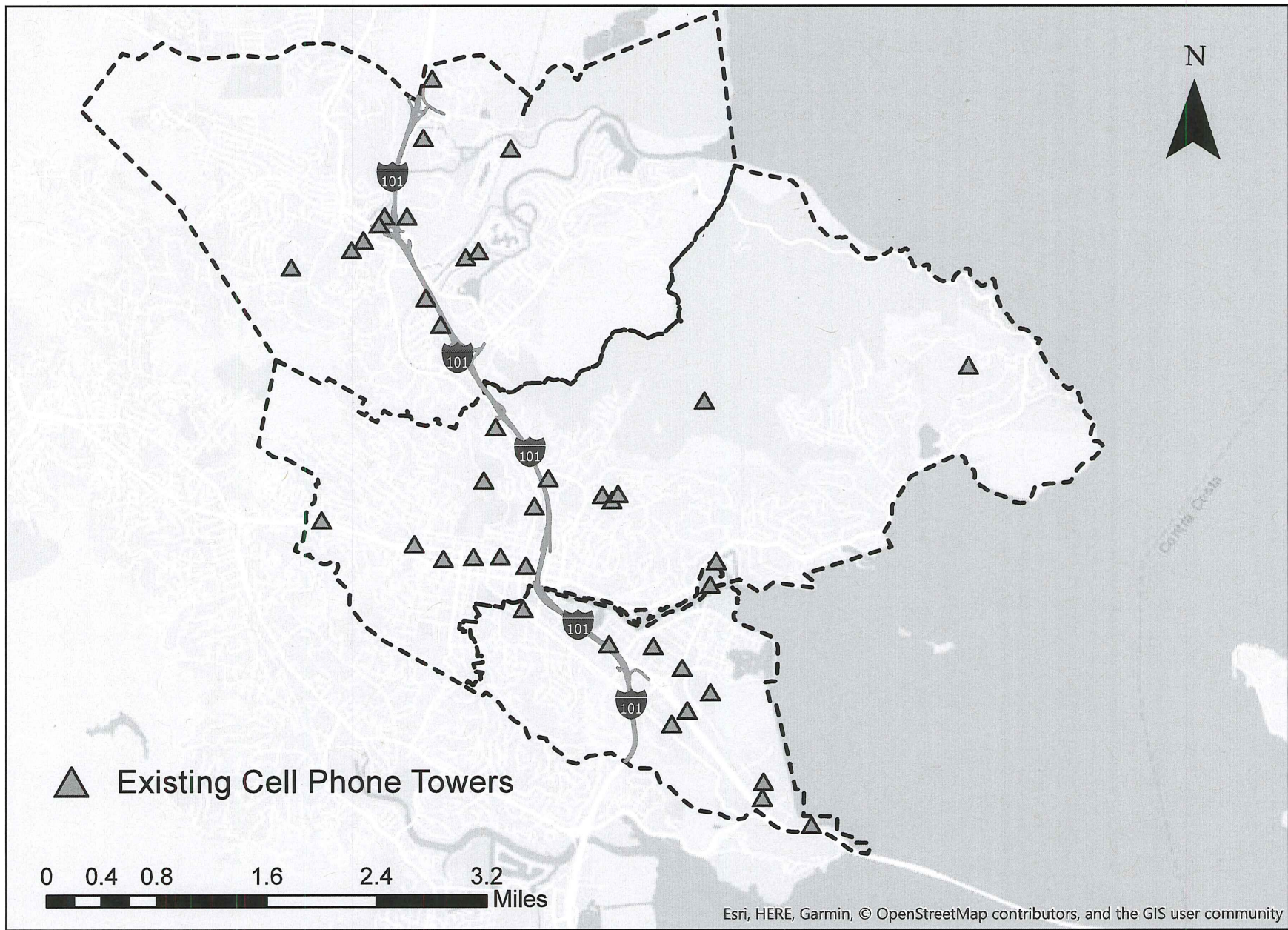
ABSENT:

\_\_\_\_\_  
LINDSAY LARA, City Clerk

**ATTACHMENT 3**

**MAP OF 41 EXISTING, PERMITTED WIRELESS  
COMMUNICATION FACILITY SITES**





**ATTACHMENT 4**

**GENERAL PLAN 2020**

**CIRCULATION ELEMENT EXHIBIT 22**

**SAN RAFAEL ROADWAYS AND ARTERIALS**

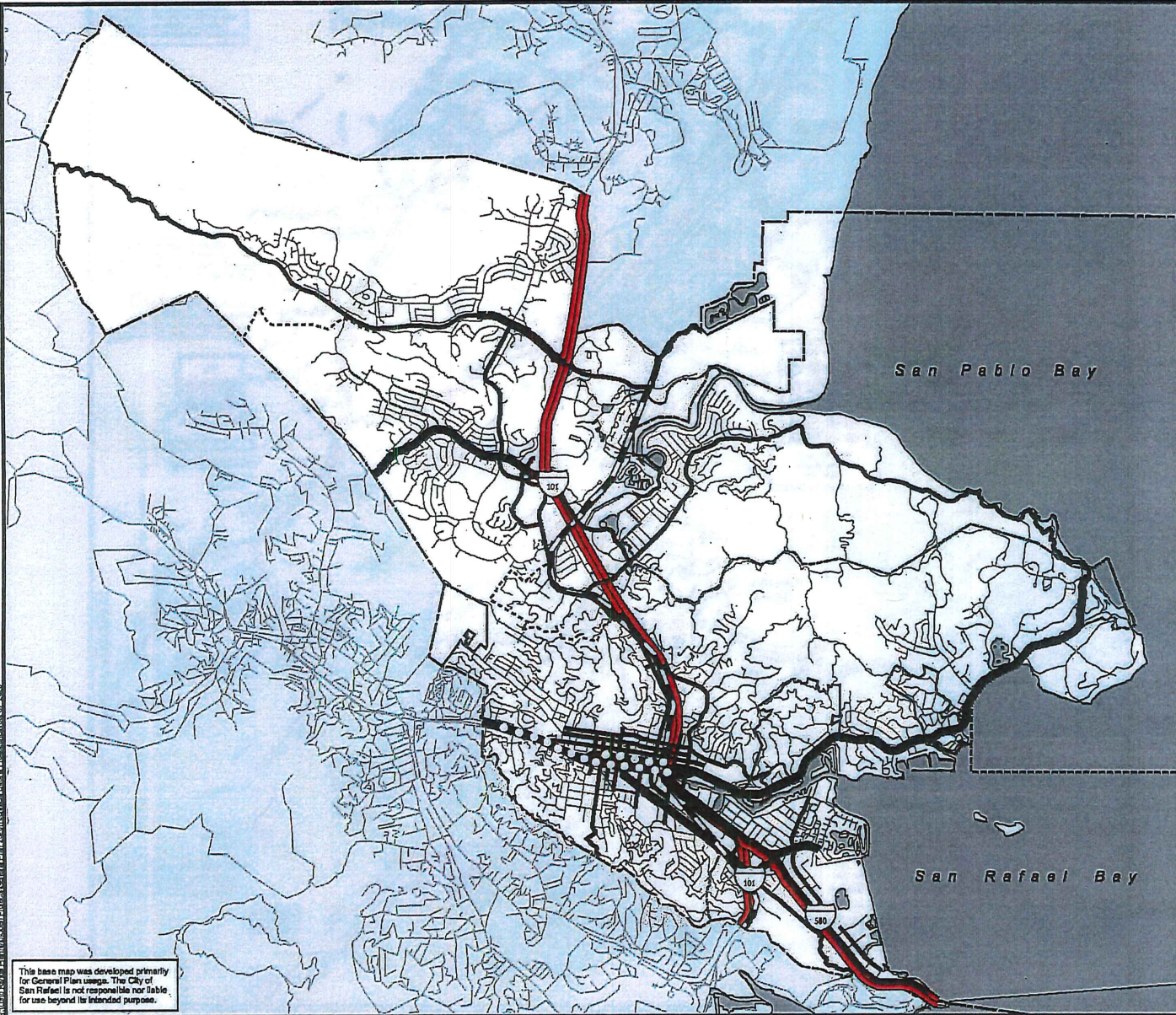


# Exhibit 22



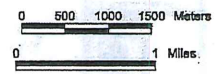
## San Rafael Roadways & Arterials

-  Highway
-  Major Arterial
-  Minor Arterial
-  Rail Right-of-Way
-  Marin County Congestion Management Plan Roadway



Map data from Esri, DeLorme, GeoEye, IGN, Aerotech, Aero, IGN, Esri, Swisstopo, Mapbox, © 2020

This base map was developed primarily for General Plan usage. The City of San Rafael is not responsible nor liable for use beyond its intended purpose.



**ATTACHMENT 5**

**CITY OF SACRAMENTO**

**SMALL CELL DESIGN & DEPLOYMENT STANDARDS**



## City of Sacramento Small Cell Design & Deployment Standards

Below are the preferred design criteria for a small cell, however other designs may be approved by the Director of the Public Works on a case by case basis.

### Poles

- Carriers should consider siting as much as possible on existing infrastructure or City assets.
- Attachments shall be limited to mast arm street lights on Caltrans Type-15 Poles.
  - Attachments to historic, ornamental, and neighborhood 20' mast arm poles shall not be permitted.
  - Attachments to traffic signal poles shall not be permitted.
- New mast arm poles (Caltrans Type-15) shall be designed per the current City Standards, to seamlessly fit with the existing lighting system.
  - New pole locations within ten (10) feet of existing utility or light poles shall not be permitted.
  - A plan for a pole shall be submitted for review and approval that shows the existing and proposed streetlight and electrical infrastructure and designed in such a way that a uniform light distribution is provided in the subject area.
  - Once approved and installed, the new streetlight pole and other infrastructure will be the property of the City of Sacramento.
- Pole locations where the transmitting antenna is less than ten (10) feet horizontal from private property (i.e. residential window, RT rail OCS poles/cables) shall not be permitted.
- Poles in violation of ADA access requirements shall not be permitted.
- Modifications to ornamental streetlight poles for the installation of photocells are the carrier's responsibility. All costs associated with fixing or replacing the damage to the pole or any components of the pole that occur during installation are to be paid by the carrier.
- All electrical circuits that include the decorative streetlight poles on Capitol Mall, from Tower Bridge to 8th Street shall be avoided for photocell modification.
- During a field verification, if a pole foundation is found to be inadequate based on the dimensions and/or condition of the foundation not matching the plans, field work shall be stopped and the plans redesigned and resubmitted with the proposed foundation details, conduit and conductor layout, anchor bolt pattern confirmation, single line diagram and site plan for City Electrical and Structural Engineering approval.
- In the case where a new pole foundation is required, wherever possible reuse the location for the existing foundation to place the new pull box for the relocated street light pole.

## City of Sacramento Small Cell Design & Deployment Standards

### Equipment and Esthetics

- Equipment on pole shall contain antenna and stacked radio relay units (RRU) only. All other equipment should be low-profile, blended into the surrounding environment, or placed in another location.
- Equipment and enclosures (not including antenna) shall be of low-profile form factor. They shall be mounted as close to the pole as allowed by applicable regulation and manufacturer equipment standards and shall not extend more than 12" from the pole.
- Antenna should be mounted in a concealed canister (cantenna) on the top of pole and all equipment should be mounted flush to the pole.
- Antenna height shall not exceed 2'.
- Antenna width shall not exceed 14.5" in diameter.
- Equipment and cabling below the antenna needs to be shrouded. All equipment on each pole shall be housed in a suitable enclosure to conceal components and cabling from public view. The enclosure shall be coated in material and color matching that of the pole. The permittee shall regularly maintain the enclosure and the equipment.
- No exposed meter, meter pan or meter pedestal may be used. Metered panels and sockets shall be mounted at 10' or higher from grade.
- Cabling below radio relay units shall enter the pole with no more than a five-inch gap between bottom of each radio relay unit and the bottom of the corresponding entry hole on the pole. Conduit connection at pole entry points shall utilize the smallest fitting sizes available. Sealing compounds, if utilized, shall be tidy without excess bubbling and painted to match pole.
- If drilling and cutting into City poles, holes will be structurally welded and reinforced. Seams and bolts/screws at antenna and shroud assembly area shall be fabricated and installed in a manner so as to reduce their visibility (e.g. flush mounting screws) from sidewalk level.
- Retain fiber and power inside the pole at the base.
- Ensure any legs/handles are removed from RRUs and equipment logos are all removed.
- Utilize signage (e.g. road, guide, informational signage), or other appropriate elements, in front of RRUs to reduce visibility for pole locations in areas which define City (e.g. historic districts)
- Remove all manufacturer decals and logos. Retain one Radio-Frequency (RF) warning sticker near antenna with smallest size and lowest visibility color allowed.

### Radio Frequency

- City RF engineer, Street Light and Signage Technicians or representatives shall have access to disconnect radio electrical service for maintenance to street lights or RF interference to public safety radio systems.



## City of Sacramento Small Cell Design & Deployment Standards

- City RF engineer shall receive RF study indicating proposed location, frequency, and EIRP will not interfere with Public Safety Radio Network.
- All wireless carriers shall provide radio maintenance contact, who can be notified prior to radio power being disconnected.

### Submittals

- Each submittal shall include a noise study. Facilities may generate no more than 45 decibels within three feet of any residential dwelling or City park boundary, and no more than 55 decibels within ten feet of any commercial structures.
- Each submittal of new poles located within 10' of roadway without curb and gutter shall include a vehicle impact study and protective devices such as bollards.
- Submittals shall be prepared by qualified professionals who are experienced in the City of Sacramento and local standards. At the minimum, submittals shall meet the following criteria:
  - Photo simulations are clear, consistent, and realistically portray antennas, equipment, offset bracket systems, and cabling. Submittals based on Google Street Views are not acceptable.
  - Include engineered drawings reflecting topographic/property maps processing ROW, PUE, and property line delineation.
  - Private property access and easements, if require, shall be supported by agreements granting the permittee such access or easements. The agreement shall hold the City harmless of any liabilities.
  - Each submittal shall include a SMUD commitment letter approving the electrical POC, connected equipment specification sheet, location map, electrical load calculation and certification that is stamped and signed by a licensed electrical engineer.
  - Underground and overhead utility shall be located and conflicts identified.
  - Bore pits and other work above surface in City ROW shall be repaired or replaced according to City standards.
- A complete submittal package for small cell installation in the right-of-way includes each item listed below and must be its own PDF and must the follow the associated naming convention below. Submit the application files electronically to [DEPermit@cityofsacramento.org](mailto:DEPermit@cityofsacramento.org).
  - Revocable Permit Application
  - Construction Encroachment Permit Application
  - Radio Frequency Report
  - Structural Analysis prepared by a State of California Licensed Civil Engineer
  - Construction Plans prepared in accordance with the City of Sacramento – Department of Public Works drawings standards. The installation of the small cell



## City of Sacramento Small Cell Design & Deployment Standards

equipment on all approved permits must be performed by an electrical contractor holding a current C-10 license, as issued by the California State License Board.

- Certificate of Liability Insurance for Contractor and Owner of Equipment
- Contractor's License (C-10) and Contact Information
- Field Walk Data Collection Form
- SMUD Application (in one PDF)
  - Required information on pages 14-15 of SMUD Agreement
  - The equipment OEM specifications
  - Self-certification letter verified by a Professional Engineer showing maximum
- Upon review and approval of a submitted application, the Encroachments Desk will contact the applicant to confirm the construction schedule, review and approve applicant's traffic control plan, and assign an inspector.
- The notice to proceed with construction activities (permit) will be issued at the pre-construction meeting by the inspector assigned by the City. It is the responsibility of the applicant or its contractor to coordinate the date, time, and location of the pre-construction meeting with the assigned inspector.

**ATTACHMENT 6**

**PUBLIC MEETING NOTICE**



## NOTICE OF PUBLIC MEETING – CITY COUNCIL

You are invited to attend the City Council meeting on the following proposed item:

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**PROJECT: Report on Small Cell (5G) Wireless Communication Technology** – The City Council will receive a presentation from Dr. Jonathan Kramer of Telecom Law Firm on Small Cell (5G) Wireless Technology, which will include the recent Federal Communication Commission (FCC) rulings and their near-term and long-term impact on local jurisdiction permitting and discretionary authority. The Community Development Department staff will also present a draft ordinance for regulating small cell facilities. The objectives of the draft ordinance are to: a) establish procedural requirements and standards to regulate the new FCC's streamlined review of small wireless communications facilities located within the public right-of-way or on public and/or private property; and b) to minimize the potential safety and aesthetic impacts on neighboring property owners and the community, and to comply with applicable state and federal laws.

*State law (California Environmental Quality Act) requires that this project be reviewed to determine if a study of potential environmental effects is required. It has been determined that this project, which is an informational report, will have no physical impact on the environment. The Report on Small Cell (5G) Technology is classified as a discussion item, which qualifies for a Statutory Exemption from the provisions of the California Environmental Quality Act Guidelines under 14 CRR Section 15262 [Feasibility and Planning Studies].*

**MEETING DATE/TIME/LOCATION:** **Monday, December 3, 2018, 7:00 p.m.** City Council Chambers, 1400 Fifth Ave at D St, San Rafael, CA

**FOR MORE INFORMATION:** Contact **Caron Parker**, Project Planner at (415) **485-3094** or **caron.parker@cityofsanrafael.org**. You can also come to the Planning Division office, located in City Hall, 1400 Fifth Avenue, San Rafael, CA 94901. The office is open from 8:30 a.m. to 4:30 p.m. on Monday, Tuesday and Thursday and 8:30 a.m. to 1:30 p.m. on Wednesday and Friday. You can also view the staff report after 5:00 p.m. on the Friday before the meeting at <http://www.cityofsanrafael.org/meetings>

**WHAT WILL HAPPEN:** You can comment on the project. The City Council will consider all public testimony. As this item is an information presentation, no formal action will be taken by the City Council. However, the City Council will be requested to provide direction on proceeding with adoption of the draft ordinance.

**IF YOU WANT TO COMMENT:** You can send written correspondence by email to the address above, or by mail/hand delivery to the Community Development Department, Planning Division, City of San Rafael, 1400 5<sup>th</sup> Avenue, San Rafael, CA 94901.

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At the above time and place, all written correspondence received will be noted and all interested parties will be heard. If you challenge in court the matter described above, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered at, or prior to, the above referenced public hearing (Government Code Section 65009 (b) (2)). Judicial review of an administrative decision of the City Council must be filed with the Court not later than the 90<sup>th</sup> day following the date of the Council's decision. (Code of Civil Procedure Section 1094.6) *Sign Language and interpretation and assistive listening devices may be requested by calling (415) 485-3085 (voice) or (415) 485-3198 (TDD) at least 72 hours in advance. Copies of documents are available in accessible formats upon request.*

*Public transportation to City Hall is available through Golden Gate Transit, Line 22 or 23. Para-transit is available by calling Whistlestop Wheels at (415) 454-0964. To allow individuals with environmental illness or multiple chemical sensitivity to attend the meeting/hearing, individuals are requested to refrain from wearing scented products.*

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**ATTACHMENT 7**

**CORRESPONDENCE RECEIVED TO DATE**

**From:** [Kim Hahn](#)  
**To:** [Paul Jensen](#)  
**Cc:** [Victoria Sievers](#); [Bob Berg](#); [Alex Stadtner](#); [Lindsay Lara](#)  
**Subject:** Recommendations for Urgency Ordinance in San Rafael: Dec. 3 Council Meeting  
**Date:** Monday, November 26, 2018 12:04:48 PM  
**Attachments:** [Recommendations for an Urgency Ordinance in San Rafael.docx](#)  
[Excerpt from Petaluma 2018 Small Cell Ordinance.docx](#)  
[EHTrust cell tower studies.docx](#)  
[mdsafetech.docx](#)  
[Saferemr list.docx](#)  
[Montgomery Co..docx](#)  
[Small.Cell.Wireless.Equipment.Policy.Approved.10.22.2018.BURLINGTON.MA.pdf](#)  
[Permit Application Requirements.docx](#)  
[Fiber Optic Cable vs. 5G Wireless Executive Summary.pptx](#)

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To: Paul Jensen, Community Development Director, San Rafael

From: Kim Hahn, Vicki Sievers, Bob Berg, Alex Stadtner

Re: Recommendations for Urgency Ordinance in San Rafael

Date: 11/26/18

Dear Paul:

Please find below the condensed form of the documents we brought to you on Monday, November 19, for our meeting about the possible installation of 5G antennas in San Rafael. You have requested that we send these as an email so that you may attach them to your Staff Report for the December 3 City Council meeting.

You will see that the page we first called "List of Asks for San Rafael Urgency Ordinance" has been updated and renamed "Recommendations for an Urgency Ordinance in San Rafael" with inserts of the other four documents we gave you on 11/19/18:

- Excerpt from Petaluma 2018 Small Cell Ordinance
- Strong Opposition to 5G Halts Small Cell Bill in Montgomery County Maryland & Verizon Drops Applications in Burlington
- Town of Burlington Policy; Applications for Small Cell Wireless Installations
- Permit Application Requirements

Note that we have also added some links and videos to help you understand the complexities of our approach.

Thank you, Paul, for continuing to work with us to provide a clear path to the most restrictive and protective Urgency Ordinance possible. We appreciate all the work that you and your staff have put forth to date.

Best regards,

Kim Hahn  
Vicki Sievers  
Bob Berg  
Alex Stadtner

P.S. Because of recent email communication mishap between Caron Parker and Vicki Sievers,

could you please let me know that you have received this email? Thank you in advance, Paul.

Sent from my hard-wired computer (with Ethernet cable and DSL modem), and airport card disabled.

## 11/26/18 Recommendations for an Urgency Ordinance in San Rafael, CA

- Height of small cell antenna tower:
  - The case for vertical offsets of 150':  
According to Paul McGavin, whose website <http://scientists4wiredtech.com/blog/> is a recognized resource for electromagnetic radiation and 5G, a nine-year survey in Sebastopol, CA, of a low-cost residence occupied by 40+ people shows serious health effects from antennas that are radiating into the second story of residences. It is imperative that antennas be installed at a height of at least 150' to protect all residents. Cellular antennas of any size or shape need to have sufficient vertical and horizontal setbacks from where people live, sleep and heal. Installing antennas less than 150' off the ground may threaten safety, privacy, and property values.
  - San Rafael could require that antennas be installed on applicant-owned and maintained poles at least **150 feet higher than the highest roof** within a 3000-foot radius of any wireless telecommunication facility.
  - San Rafael could require that the applicant install only equipment that has **no chance of outputting peak RF-EMR exposures any higher than 150  $\mu\text{W}/\text{m}^2$  anywhere people live** (metered as peak RF-EMR exposures outside on the ground or outside of the highest windows of any building within a 3000- foot radius of any antenna).
- Distances:
  - Distance from residence: 500' Small Cell Antenna setback from residential homes (See attachment: "Excerpt from Petaluma 2018 Small Cell Ordinance," p. 6 below)
  - Distance between ("Separation of") small cell antennas: 3000'  
(View the YouTube video of Verizon CEO Lowell McAdam and Field Engineer Jason L. as they demonstrate the 3000' radius of a single 5G antenna:  
[https://www.youtube.com/watch?time\\_continue=4&v=FwAsr1pC13Q](https://www.youtube.com/watch?time_continue=4&v=FwAsr1pC13Q))  
Clearly, any resident who is standing between two antennas positioned 3000' apart will be in the path of both. Documentation of safe human distance from any single antenna has been shown to be 1500'. Therefore, any positioning of antennas closer than 3000' apart will radiate at double the FCC standards in any location between the two antennas.  
(See the attachments:
    - EHTrust cell tower studies ("Compilation of Research Studies on Cell Tower Radiation and Health")
    - mdsafetech.docx
    - Saferemr list.docx)
- Monitoring:  
Require provider to supply 24/7 monitoring platform to City of San Rafael at provider's cost. The city has the right to turn off antennas that exceed the stated compliance levels.
- ADA Compliance:



5G Small Cell Antennas must be ADA (a federal law) compliant, enabling removal of any 5G Small Cell Antennas found to be causing harm to residents with EHS (Visit: <http://www.electrosmogprevention.org/smart-meter-resources-links/ada-accommodations-info/recognition-of-the-electromagnetic-sensitivity-as-a-disability-under-the-ada/> )

- Zoning:

Add definitions and table titled "Implementing Zoning Ordinance" (IZO) from the Petaluma ordinance (See attachment "Excerpt from Petaluma 2018 Small Cell Ordinance," pgs. 6 and 7)

- Location within City Zones:

Limit 5G Small Cell Antennas to Industrial Zones - include definitions and examples for each zone.

- Approach to a Protective Permit Process:

Revise existing permit process to include key points from the attached below:

"Montgomery Co." ("Strong Opposition to 5G Halts Small Cell Bill in Montgomery County Maryland & Verizon Drops Applications in Burlington").

- Application and Re-certification Process:

View the finished product from Burlington, MA, and adopt resourceful ways to include procedures and language that will protect the safety, aesthetics, and property values of San Rafael residents.

(See attachment:

"Small.Cell.Wireless.Equipment.Policy.Approved.10.22.2018.BURLINGTON.MA.pdf")

- Permit Application Requirements

Incorporate points from the attachment "Permit Application Requirements" to clarify and solidify San Rafael's permit application procedure for small cell installations.

(See attachment "Permit Application Requirements.")

- Fiber Optic as a Sound Alternative to 5G

View the Fiber Optic PowerPoint, Condensed Version, to study the superior benefits of Fiber Optic Cable and to learn how San Rafael can access the fiber backbone already installed by Zayo for LucasFilm.

(See "Fiber Optic Cable vs. 5G Wireless Executive Summary.pptx")

## **Excerpt from Petaluma 2018 Small Cell Ordinance**

**Section 2.** Sections 14.44.020 and 14.44.090 of Chapter 14.44 - Telecommunications Facility and Antenna Requirement of the PMC are hereby amended to read as follows:

### **14.44.020 Definitions.**

S. "Telecommunication facility" means a facility that transmits and/or receives electromagnetic signals. It includes antennas, microwave dishes, horns, and other types of equipment for the transmission or receipt of such signals, telecommunication towers or similar structures supporting said equipment, equipment buildings, parking area, and other accessory development.

1. "Telecommunications facility - exempt" includes but is not limited to, the following unless located within a recognized Historic District:
  - a. A single ground or building mounted receive-only radio or television antenna including any mast, for the sole use of the tenant occupying the residential parcel on which the radio or television antenna is located; with an antenna height not exceeding twenty-five feet;
  - b. A ground or building mounted citizens band radio antenna including any mast, if the height (post and antenna) does not exceed thirty-five feet;
  - c. A ground, building, or tower mounted antenna operated by a federally licensed amateur radio operator as part of the Amateur Radio Service, if the height (post and antenna) does not exceed thirty-five feet
  - d. A ground or building mounted receive-only radio or television satellite dish antenna, which does not exceed thirty-six inches in diameter, for the sole use of the resident occupying a residential parcel on which the satellite dish is located; provided the height of said dish does not exceed the height of the ridgeline of the primary structure on said parcel.

e. All citizens band radio antenna or antenna operated by a federally licensed amateur radio operator as part of the Amateur Radio Service which existed at the time of the adoption of this chapter (September 1996).

f. Mobile services providing public information coverage of news events of a temporary nature.

g. Hand-held devices such as cell phones, business-band mobile radios, walkie-talkies, cordless telephones, garage door openers and similar devices as determined by the planning director.

h. City government owned and operated receive and/or transmit telemetry station antennas for supervisory control and data acquisition (SCADA) systems for water, flood alert, traffic control devices and signals, storm water, pump stations and/or irrigation systems, with heights not exceeding thirty-five feet.

2. "Telecommunications facilities - major" are all telecommunication facilities not clearly set forth and included in the definition of exempt, minor or mini facilities.

3. "Telecommunications facility - mini" is an attached wireless communication facility consisting, but not limited to, the following unless located on a structure recognized as a historic landmark:

a. A single ground or building mounted receive-only radio or television antenna including any mast, for the sole use of the tenant occupying the parcel on which the radio or television antenna is located; with an antenna height not exceeding fifty feet;

b. A ground or building mounted citizens band radio antenna including any mast, if the height (tower, support structure, post and antenna) does not exceed seventy feet;

c. A ground, building, or tower mounted antenna operated by a federally licensed amateur radio operator as part of the Amateur Radio Service, if the height (post and antenna) does not exceed seventy feet.

d. A ground or building mounted receive-only radio or television satellite dish antenna, with diameter exceeding thirty-six inches but less than eight feet in diameter, for the sole use of the resident occupying a residential parcel on which the satellite dish is located; provided the height of said dish does not exceed the height of the ridgeline of the primary structure on said parcel.

e. Exempt telecommunication facility located within a recognized historic district.

f. City owned and operated antennae used for emergency response services, public utilities, operations and maintenance if the height does not exceed seventy feet.

If a facility does not meet these criteria then it is considered either an “exempt”, “minor” or “major” telecommunication facility.

4. “Telecommunications facility - minor” means any of the following:

a. Antennae which meet the definition of “mini” with the exception of the height limit.

b. Telecommunications facilities less than thirty-five feet in height and that adhere to Section 14.44.090 of Chapter 14.44 of the Petaluma Municipal Code.

c. A single ground or building mounted whip (omni) antenna without a reflector, less than four inches in diameter whose total height does not exceed thirty-five feet; including any mast to which it is attached, located on commercial and/or industrial zoned property.

d. A ground or building mounted panel antenna whose height is equal to or less than four feet and whose area is not more than four hundred eighty square inches in the aggregate (e.g., one-foot diameter parabola or two feet by one and one-half foot panel) as viewed from any one point, located on commercial or industrial zoned property. The equipment cabinets shall be designed, placed and screened to be

unobtrusive and effectively unnoticeable.

e. More than three antennas, satellite dishes (greater than three feet in diameter), panel antennas, or combination thereof, are proposed to be placed on the commercial or industrial parcel, including existing facilities.

f. Building mounted antennas which, in the opinion of the planning director, are unobtrusive or undetectable by way of design and/or placement on the building, regardless of number, when located on commercial or industrial zoned property.

g. Telecommunications facilities less than fifty feet in height, in compliance with the applicable sections of this chapter, located on a parcel owned by the city of Petaluma and utilized for public and/or quasi-public uses where it is found by the planning director to be compatible with the existing city uses of the property.

h. Telecommunication facilities, including multiple antennas, in compliance with the applicable sections of this chapter, located on an industrial parcel and utilized for the sole use and purpose of a research and development tenant of said parcel, where it is found by the planning director to be aesthetically compatible with the existing and surrounding structures.

i. Telecommunication facilities located on a structure recognized as a historic landmark.

If a facility does not meet these criteria then it is considered a "major" telecommunication facility.

5. "Telecommunication facility - co-located" means a telecommunication facility comprised of a single telecommunication tower or building supporting one or more antennas, dishes, or similar devices owned or used by more than one public or private entity.

6. "Telecommunication facility - commercial" means a telecommunication facility that is operated primarily for a business

purpose or purposes.

7. "Telecommunication facility - multiple user" means a telecommunication facility comprised of multiple telecommunication towers or buildings supporting one or more antennas owned or used by more than one public or private entity, excluding research and development industries with antennas to serve internal uses only.

8. "Telecommunication facility - noncommercial" means a telecommunication facility that is operated solely for a non-business purpose.

9. "Telecommunications facility - small cell" means a telecommunications facility that is pole mounted to existing public utility infrastructure.

#### **14.44.095 Small Cell facilities - Basic Requirements.**

Small Cell facilities as defined in Section [14.44.020](#) of this chapter may be installed, erected, maintained and/or operated in any commercial or industrial zoning district where such antennas are permitted under this title, upon the issuance of a minor conditional use permit, so long as all the following conditions are met:

- A. The Small Cell antenna must connect to an already existing utility pole that can support its weight.
- B. All new wires needed to service the Small Cell must be installed within the width of the existing utility pole so as to not exceed the diameter and height of the existing utility pole.
- C. All ground-mounted equipment not installed inside the pole must be undergrounded, flush to the ground, within three (3) feet of the utility pole.
- D. Each Small Cell must be at least 1,500 feet away from the nearest Small Cell facility.
- E. Aside from the transmitter/antenna itself, no additional

equipment may be visible.

- F. Each Small Cell must be at least 500 feet away from any residence.
- G. An encroachment permit must be obtained for any work in the public right-of-way.

**Section 3.** Section 7.090 of the IZO, Ordinance 2300 N.C.S., is amended to read as follows:

**7.090 - Telecommunications Facilities.**

The following requirements apply to Telecommunications Facilities as defined in the City’s Telecommunications Ordinance, Petaluma Municipal Code Chapter 14.44.

A. Definitions. The types of facilities regulated by this section are defined in the City’s Telecommunications Ordinance, Petaluma Municipal Code Chapter 14.44.

B. Telecommunications facilities are allowed only as described in Table 7.090(B).

**Table 7.090B**

Zoning District	Type of Telecommunications Facility				
	Exempt	Mini	Minor	Major	Small
<b>OSP</b>	A	A	CUP	CUP	CUP
<b>AG</b>	A	A	-	-	-
<b>RR</b>	A	A	-	-	-
<b>R1</b>	A	A	-	-	-



<b>R2</b>	A	A	-	-	-
<b>R3</b>	A	A	-	-	-
<b>R4</b>	A	A	-	-	-
<b>R5</b>	A	A	-	-	-
<b>C1</b>	A	A	CUP	CUP	CUP
<b>C2</b>	A	A	CUP	CUP	CUP

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<b>MU1 A</b>	A	A	CUP	CUP	CUP
<b>MU1 B</b>	A	A	CUP	CUP	CUP
<b>MU1 C</b>	A	A	-	-	-
<b>MU2</b>	A	A	CUP	CUP	CUP
<b>BP</b>	A	A	CUP	CUP	CUP
<b>I</b>	A	A	CUP	CUP	CUP
<b>CF</b>	A	A	CUP	CUP	CUP

C. Where a telecommunications facility is permitted by Table 7.090B, the approval(s) required prior to the commencement of the operation of a Telecommunications Facility are as prescribed in subsections 1-4 below.

1. Exempt Facility. An Exempt facility is an Accessory Use and no special permit is required, except when an Exempt facility is located in a Historic District. An Exempt facility located in a

Historic District or on the site of a designated landmark is considered a Mini Facility subject to administrative Historic and Cultural Preservation approval as prescribed in Section 15.050.

2. Mini Facility. A Mini Facility is an Accessory Use subject to administrative site plan and architectural review approval as prescribed by Section 24.010. When a Mini facility is located in a Historic District or on the site of a designated landmark, the following special permits are required:

a. A Minor conditional use permit as prescribed in Section 24.030; and

b. Administrative Historic and Cultural Review as prescribed in 15.030.

3. Minor Facility. A Minor facility requires approval of a minor conditional use permit as prescribed in Section 24.030 and administrative site plan and architectural review approval as prescribed in Section 24.010. When a Minor facility is located in a Historic District or on the site of a designated landmark, approval of a major conditional use permit as prescribed in Section 24.030 and Historic and Cultural Preservation Committee approval as prescribed in Section 15.030 are required.

4. Major Facility. A major facility requires approval of a major conditional use permit as prescribed in Section 24.030 and Planning Commission approval as prescribed in Section 24.101.

5. Small Facility. A Small Cell Facility requires approval of a minor conditional use permit as prescribed in Section 24.030 and administrative site plan and architectural review approval as prescribed in Section 24.010. An encroachment permit for public right-of-way work is also required. The right-of-way shall be subject to the designation of the zone adjacent to the right-of-way, for purposes of the Table 7.090(B) designation.

D. A Telecommunication facility shall comply with the development standards (Tables 4.6 – 4.13) for the zoning district in which the facility is located, the City's Telecommunications Ordinance, and all other applicable City requirements.

# Compilation of Research Studies on Cell Tower Radiation and Health

## What Does the Published Research Say About Cell Tower Radiation and Health

### American Academy of Pediatrics Website

#### “Electromagnetic Fields: A Hazard to Your Health?” on Cell Tower Radiation

“In recent years, concern has increased about exposure to radio frequency electromagnetic radiation emitted from cell phones and phone station antennae. An Egyptian study confirmed concerns that living nearby mobile phone base stations increased the risk for developing:

- Headaches
- Memory problems
- Dizziness
- Depression
- Sleep problems

Short-term exposure to these fields in experimental studies have not always shown negative effects, but this does not rule out cumulative damage from these fields, so larger studies over longer periods are needed to help understand who is at risk. In large studies, an association has been observed between symptoms and exposure to these fields in the everyday environment.”

–[American Academy of Pediatrics](#)

### Compilation of Research Studies on Cell Tower Radiation and Health

Zothansiam, et al. [“Impact of radiofrequency radiation on DNA damage and antioxidants in peripheral blood lymphocytes of humans residing in the vicinity of mobile phone base stations.”](#) Electromagnetic Biology and Medicine 36.3 (2017): 295-305.

- This study evaluated effects in the human blood of individuals living near mobile phone base stations (within 80 meters) compared with healthy controls (over 300 meters). The study found higher radiofrequency radiation exposures and statistically significant differences in the blood of people living closer to the cellular antennas. The group living closer to the antennas had for example, statistically significant higher frequency of micronuclei and a rise in lipid peroxidation in their blood. These changes are considered biomarkers predictive of cancer.

[Neurobehavioral effects among inhabitants around mobile phone base stations](#) Abdel-Rassoul et al, Neurotoxicology, 2007

- This study found that living nearby mobile phone base stations (cell antennas) increased the risk for neuropsychiatric problems such as headaches, memory problems, dizziness, tremors, depression, sleep problems and some changes in the performance of neurobehavioral functions.

[Biological Effects from Exposure to Electromagnetic Radiation Emitted by Cell Tower Base Stations and Other Antenna Arrays](#), Levitt & Lai, Environmental Reviews, 2010

- This review of 100 studies found approximately 80% showed biological effects near towers. “Both anecdotal reports and some epidemiology studies have found headaches, skin rashes, sleep disturbances, depression, decreased libido, increased rates of suicide, concentration problems, dizziness, memory changes, increased risk of cancer, tremors, and other neurophysiological effects in populations near base stations.”

[Mortality by neoplasia and cellular telephone base stations](#). Dode et al. (Brazil), Science of the Total Environment, Volume 409, Issue 19, 1 September 2011, Pages 3649–3665

- This 10 year study on cell phone antennas by the Municipal Health Department in Belo Horizonte and several universities in Brazil found a clearly elevated relative risk of cancer mortality at residential distances of 500 meters or less from cell phone transmission towers. Shortly after this study was published, the city prosecutor sued several cell phone companies and requested that almost half of the cities antennas be removed. Many antennas were dismantled.

[Epidemiological Evidence for a Health Risk from Mobile Phone Base Stations](#) Khurana, Hardell et al., International Journal of Occupational Environmental Health, Vol 16(3):263-267, 2010

- A review of 10 epidemiological studies that assessed for negative health effects of mobile phone base stations (4 studies were from Germany, and 1 each from Austria, Egypt, France, Israel, Poland, Spain) found that seven showed altered neurobehavioral effects near cell tower and three showed increased cancer incidence. The review also found that eight of the 10 studies reported increased prevalence of adverse neurobehavioral symptoms or cancer in populations living at distances < 500 meters from base stations. Lower cognitive performance was found in individuals living  $\leq 10$  meters from base stations. None of the studies reported exposure above accepted international guidelines, suggesting that current guidelines may be inadequate in protecting the health of human populations.

[Health effects of living near mobile phone base transceiver station \(BTS\) antennae: a report from Isfahan, Iran](#). Shahbazi-Gahrouei et al, Electromagnetic Biology Medicine, 2013.

- This cross-sectional study found the symptoms of nausea, headache, dizziness, irritability, discomfort, nervousness, depression, sleep disturbance, memory loss and lowering of libido were statistically increased in people living closer than 300 m from cell antennas as compared to those living farther away. The study concludes that “antennas should not be sited closer than 300 m to people to minimize exposure.”

[Long-term exposure to microwave radiation provokes cancer growth: evidences from radars and mobile communication systems. Yakymenko](#) (2011) Exp Oncology, 33(2):62-70.

- Even a year of operation of a powerful base transmitting station for mobile communication reportedly resulted in a dramatic increase of cancer incidence among population living nearby.

[Association of Exposure to Radio-Frequency Electromagnetic Field Radiation \(RF-EMFR\) Generated by Mobile Phone Base Stations \(MPBS\)with Glycated Hemoglobin \(HbA1c\) and Risk of Type 2 Diabetes Mellitus](#) , Sultan Ayoub Meo et al, International Journal of Environmental Research and Public Health, 2015

- Elementary school students who were exposed to high RF-EMFR generated by MPBS had a significantly higher risk of type 2 diabetes mellitus relative to their counterparts who were exposed to lower RF-EMFR.

[How does long term exposure to base stations and mobile phones affect human hormone profiles?](#)

Eskander EF et al, (2011), Clin Biochem

- RFR exposures significantly impacted ACTH, cortisol, thyroid hormones, prolactin for females, and testosterone levels for males.

[Investigation on the health of people living near mobile telephone relay stations: Incidence according to distance and sex](#) Santini et al, 2002 , Pathol Bio

- People living near mobile phone masts reported more symptoms of headache, sleep disturbance, discomfort, irritability, depression, memory loss and concentration problems the closer they lived to the installation. Study authors recommend that the minimal distance of people from cellular phone base stations should not be < 300 m.

Navarro EA, Segura J, Portoles M, Gomez-Perretta C, [The Microwave Syndrome: A preliminary Study.](#) 2003 (Spain) Electromagnetic Biology and Medicine, Volume 22, Issue 2, (2003): 161 – 169

- Statistically significant positive exposure-response associations between RFR intensity and fatigue, irritability, headaches, nausea, loss of appetite, sleeping disorder, depressive tendency, feeling of discomfort, difficulty in concentration, loss of memory, visual disorder, dizziness and cardiovascular problems.

## Two Important Animal Studies on Radiofrequency Radiation

These studies indicate that government limits are non protective. Government limits are based on the assumption that radiofrequency radiation is only harmful at thermal levels. However, the cancers developed in animals in these studies at radiation levels that were non thermal.

Belpoggi et al. 2018, "[Report of final results regarding brain and heart tumors in Sprague-Dawley rats exposed from prenatal life until natural death to mobile phone radiofrequency field representative of a 1.8 GHz base station environmental emission](#)" Environmental Research Journal

- Researchers with the renowned Ramazzini Institute (RI) in Italy performed a large-scale lifetime [study](#) of lab animals exposed to environmental levels (comparable to allowable limits from cell towers) of RFR radiation and found the rats developed increased cancers- schwannoma of the heart in male rats. This study confirms the \$25 million [US National Toxicology Program](#) study which used much higher levels of cell phone radiofrequency (RF) radiation, but also reported finding the same unusual cancers as the Ramazzini- schwannoma of the heart in male rats. In addition, the RI study of cell tower radiation also found increases in malignant brain (glial) tumors in female rats and precancerous conditions including Schwann cells hyperplasia in both male and female rats.
- "Our findings of cancerous tumors in rats exposed to environmental levels of RF are consistent with and reinforce the results of the US NTP studies on cell phone radiation, as both reported increases in the same types of tumors of the brain and heart in Sprague-Dawley rats. Together, these studies provide sufficient evidence to call for the International Agency for Research on Cancer (IARC) to re-evaluate and re-classify their conclusions regarding the carcinogenic potential of RFR in humans," said Fiorella Belpoggi PhD, study author and RI Director of Research.
- The Ramazzini study exposed 2448 Sprague-Dawley rats from prenatal life until their natural death to "environmental" cell tower radiation for 19 hours per day (1.8 GHz GSM radiofrequency radiation (RFR) of 5, 25 and 50 V/m). RI exposures mimicked base station emissions like those from cell tower antennas, and exposure levels were far less than those used in the NTP studies of cell phone radiation.
- [Watch Press Conference](#)

Wyde, Michael, et al. "National Toxicology Program Carcinogenesis Studies of Cell Phone Radiofrequency Radiation in Hsd: Sprague Dawley® SD rats (Whole Body Exposure).[Statement on conclusions of the peer review meeting by NIEHS, released after external peer review meeting](#) and the [DNA damage presentation](#).

- This 25 million dollar study is the most complex study completed by the NTP and the world's largest rodent study on radiofrequency radiation exposure to date which found long term exposure at non thermal levels associated with brain cancer and schwannomas of the heart in male rats. In addition damage to heart was found in all exposure levels. The full report is expected to be released in Fall 2018.

## More Important Studies on Cell Tower Radiation

Cindy L. Russell, [5 G wireless telecommunications expansion: Public health and environmental implications](#), Environmental Research, 2018, ISSN 0013-9351

- Radiofrequency radiation (RF) is increasingly being recognized as a new form of [environmental pollution](#). This article reviews relevant [electromagnetic](#) frequencies, exposure standards and current scientific literature on the health implications of 2G, 3G, 4G and 5G.
- Effects can also be non-linear. Because this is the first generation to have cradle-to-grave lifespan exposure to this level of man-made microwave (RF EMR) radiofrequencies, it will be years or decades before the true health consequences are known. Precaution in the roll out of this new technology is strongly indicated.

Noa Betzalel, Paul Ben Ishai, Yuri Feldman, [The human skin as a sub-THz receiver – Does 5G pose a danger to it or not?](#), Environmental Research, Volume 163, 2018, Pages 208-216, ISSN 0013-9351,

- Researchers have developed a unique simulation tool of human skin, taking into account the skin [multi-layer structure](#) together with the helical segment of the sweat duct embedded in it. They found that the presence of the sweat duct led to a high specific absorption rate (SAR) of the skin in [extremely high frequency](#) band that will be used in 5G. “One must consider the implications of human immersion in the electromagnetic noise, caused by devices working at the very same frequencies as those, to which the sweat duct (as a helical antenna) is most attuned. We are raising a warning flag against the unrestricted use of sub-THz technologies for communication, before the possible consequences for public health are explored.”

[Mobile phone infrastructure regulation in Europe: Scientific challenges and human rights protection](#)

Claudia Roda, Susan Perry, Environmental Science & Policy, Volume 37, March 2014, Pages 204-214.

- This article was published in Environmental Science & Policy by human rights experts. It argues that cell tower placement is a human rights issue for children.
- “We argue that (1) because protection of children is a high threshold norm in Human Right law and (2) the binding language of the Convention on the Rights of the Child obliges States Parties to provide a higher standard of protection for children than adults, any widespread or systematic form of environmental pollution that poses a long-term threat to a child’s rights to life, development or health may constitute an international human rights violation.
- In particular we have explained how the dearth of legislation to regulate the installation of base stations (cell towers) in close proximity to children’s facilities and schools clearly constitutes a human rights concern according to the language of the Convention on the Rights of the Child, a treaty that has been ratified by all European States.

[SAFETY ZONE DETERMINATION FOR WIRELESS CELLULAR TOWER](#) Nyakyi et al, Tanzania (2013)



- This research looked at the radiation that cell towers emit and states a safety zone is needed around the towers to ensure safe sleeping areas. The authors state that “respective authorities should ensure that people reside far from the tower by 120m or more depending on the power transmitted to avoid severe health effect.”

[A cross-sectional case control study on genetic damage in individuals residing in the vicinity of a mobile phone base station.](#) Ghandi et al, 2014 (India):

- This cross-sectional case control study on genetic damage in individuals living near cell towers found genetic damage parameters of DNA were significantly elevated. The authors state, “The genetic damage evident in the participants of this study needs to be addressed against future disease-risk, which in addition to neurodegenerative disorders, may lead to cancer.”

[Human disease resulting from exposure to electromagnetic fields,](#) Carpenter, D. O. Reviews on Environmental Health, Volume 28, Issue 4, Pages 159172.

- This review summarizes the evidence stating that excessive exposure to magnetic fields from power lines and other sources of electric current increases the risk of development of some cancers and neurodegenerative diseases, and that excessive exposure to RF radiation increases risk of cancer, male infertility, and neurobehavioral abnormalities.

[Signifikanter Rückgang klinischer Symptome nach Senderabbau – eine Interventionsstudie. \(English-Significant Decrease of Clinical Symptoms after Mobile Phone Base Station Removal – An Intervention Study\)](#) Tetsuharu Shinjyo and Akemi Shinjyo, 2014 Umwelt-Medizin-Gesellschaft, 27(4), S. 294-301.

- Japanese study Showed Statistically Significant Adverse Health Effects from electromagnetic radiation from mobile phone base stations. Residents of a condominium building that had cell tower antennas on the rooftop were examined before and after cell tower antennas were removed. In 1998, 800MHz cell antennas were installed, then later in 2008 a second set of antennas (2GHz) were installed. Medical exams and interviews were conducted before and after the antennas were removed in 2009 on 107 residents of the building who had no prior knowledge about possible. These results lead researchers to question the construction of mobile phone base stations on top of buildings such as condominiums or houses.

[Effect of GSTM1 and GSTT1 Polymorphisms on Genetic Damage in Humans Populations Exposed to Radiation From Mobile Towers.](#) Gulati S, Yadav A, Kumar N, Kanupriya, Aggarwal NK, Kumar R, Gupta R., Arch Environ Contam Toxicol. 2015 Aug 5. [Epub ahead of print]

- In our study, 116 persons exposed to radiation from mobile towers and 106 control subjects were genotyped for polymorphisms in the GSTM1 and GSTT1 genes by multiplex polymerase chain reaction method. DNA damage in peripheral blood lymphocytes was determined using alkaline comet assay in terms of tail moment (TM) value and micronucleus assay in buccal cells (BMN). Our results indicated that TM value and BMN frequency were higher in an exposed population

compared with a control group and the difference is significant. In our study, we found that different health symptoms, such as depression, memory status, insomnia, and hair loss, were significantly associated with exposure to EMR. Damaging effects of nonionizing radiation result from the generation of reactive oxygen species (ROS) and subsequent radical formation and from direct damage to cellular macromolecules including DNA.

[Subjective symptoms, sleeping problems, and cognitive performance in subjects living near mobile phone base stations](#), Hutter HP et al, (May 2006), *Occup Environ Med.* 2006 May;63(5):307- 13

- Found a significant relationship between some cognitive symptoms and measured power density in 365 subjects; highest for headaches. Perceptual speed increased, while accuracy decreased insignificantly with increasing exposure levels.

Oberfeld, A.E. Navarro, M. Portoles, C. Maestu, C. Gomez-Perretta, [The microwave syndrome: further aspects of a Spanish study](#),

- A health survey was carried out in La Ñora, Murcia, Spain, in the vicinity of two GSM 900/1800 MHz cellular phone base stations. The adjusted (sex, age, distance) logistic regression model showed statistically significant positive exposure-response associations between the E-field and the following variables: fatigue, irritability, headaches, nausea, loss of appetite, sleeping disorder, depressive tendency, feeling of discomfort, difficulty in concentration, loss of memory, visual disorder, dizziness and cardiovascular problems.

[Bortkiewicz et al, 2004 \(Poland\). Subjective symptoms reported by people living in the vicinity of cellular phone base stations: review](#), *Med Pr.*2004;55(4):345-51.

- Residents close to mobile phone masts reported: more incidences of circulatory problems, sleep disturbances, irritability, depression, blurred vision and concentration difficulties the nearer they lived to the mast.
- The performed studies showed the relationship between the incidence of individual symptoms, the level of exposure, and the distance between a residential area and a base station.

Wolf R and Wolf D, [Increased Incidence of Cancer Near a Cell-phone Transmitter Station](#), *International Journal of Cancer Prevention*, (Israel) VOLUME 1, NUMBER 2, APRIL 2004

- A significant higher rate of cancer (300% increase) among all residents living within 300m radius of a mobile phone mast for between three and seven years was detected.
- 900% cancer increase among women alone
- In the area of exposure (area A) eight cases of different kinds of cancer were diagnosed in a period of only one year. This rate of cancers was compared both with the rate of 31 cases per 10,000 per year in the general population and the 2/1222 rate recorded in the nearby clinic (area B). The study indicates an association between increased incidence of cancer and living in proximity to a cell-phone transmitter station.

[Changes of Neurochemically Important Transmitters under the influence of modulated RF fields – A Long Term Study under Real Life Conditions](#)(Germany), Bucher and Eger, 2011

- German study showing elevated levels of stress hormones (adrenaline, noradrenaline), and lowered dopamine and PEA levels in urine in area residents during 1st 6 months of cell tower installation. Even after 1.5 years, the levels did not return to normal.

[The Influence of Being Physically Near to a Cell Phone Transmission Mast on the Incidence of Cancer](#) (Umwelt·Medizin·Gesellschaft 17,4 2004) [Eger et al, 2004 \(Germany\)](#)

- 200% increase in the incidence of malignant tumors was found after five years' exposure in people living within 400m radius of a mobile phone mast. The proportion of newly developing cancer cases is significantly higher among patients who live within 400 meters of a cell phone transmitter. Early age of cancer diagnosis.

[Microwave electromagnetic fields act by activating voltage-gated calcium channels: why the current international safety standards do not predict biological hazard.](#) Martin L. Pall. Recent Res. Devel. Mol. Cell Biol. 7(2014).

- “It can be seen from the above that 10 different well-documented microwave EMF effects can be easily explained as being a consequence of EMF VGCC activation: oxidative stress, elevated single and double strand breaks in DNA, therapeutic responses to such EMFs, breakdown of the blood-brain barrier, cancer, melatonin loss, sleep dysfunction, male infertility and female infertility.”

Pall ML. 2015. [Microwave frequency electromagnetic fields \(EMFs\) produce widespread neuropsychiatric effects including depression.](#) J. Chem. Neuroanat. 2015 Aug 20.

- Non-thermal microwave/lower frequency electromagnetic fields (EMFs) act via voltage-gated calcium channel (VGCC) activation.
- Two U.S. government reports from the 1970s to 1980s provide evidence for many neuropsychiatric effects of non-thermal microwave EMFs, based on occupational exposure studies. 18 more recent epidemiological studies, provide substantial evidence that microwave EMFs from cell/mobile phone base stations, excessive cell/mobile phone usage and from wireless smart meters can each produce similar patterns of neuropsychiatric effects, with several of these studies showing clear dose–response relationships.
- Lesser evidence from 6 additional studies suggests that short wave, radio station, occupational and digital TV antenna exposures may produce similar neuropsychiatric effects. Among the more commonly reported changes are sleep disturbance/insomnia, headache, depression/depressive symptoms, fatigue/tiredness, dysesthesia, concentration/attention dysfunction, memory changes, dizziness, irritability, loss of appetite/body weight, restlessness/anxiety, nausea, skin burning/tingling/dermographism and EEG changes. In summary, then, the mechanism of action of microwave EMFs, the role of the VGCCs in the brain, the impact of non-thermal EMFs on the

brain, extensive epidemiological studies performed over the past 50 years, and five criteria testing for causality, all collectively show that various non-thermal microwave EMF exposures produce diverse neuropsychiatric effects.

From [mdsafetech.org](http://mdsafetech.org)

<https://mdsafetech.org/cell-tower-health-effects/>

## Scientific Literature

The number of cell towers worldwide has had exponential growth since the 1990's. In the U.S. large cell tower numbers have risen from about 900 in 1985 to over 308,334 cell sites in service in 2016. This is according to the Cellular Telecommunications Industry Association (CTIA), established in 1984 just before the rollout of cell towers. The telecommunications industry places cell towers in cities but also leases rooftops on schools, churches, businesses and apartment buildings with antennas for one or more carriers. This co-location can create clusters of antennas with different frequencies in close proximity to where people live and work. These base stations emit a continuous stream of microwave radiofrequencies exposing residents to whole body exposures. More cell towers are being proposed throughout the US now on a statewide and federal level to accommodate proposed 5G high frequency telecommunications with cell towers about every 250 meters (~750 feet). See also [5G Telecommunications Science](#) or [5G Mobile Communications](#) or [Cell Towers and City Ordinances](#) or [New Legislation Cell Towers](#)

The rise in cell towers has been accompanied by scientific observations and reports of both human health and environmental decline in many countries.

### Adverse Health Symptoms Near Cell Towers

The majority of published studies in different countries have shown a relationship between distance from base stations and a variety of health complaints. They have found that the closer to the towers people live there is an increase incidence of reported symptoms including those below. These are the same symptoms that people who have electrosensitivity experience.

- headaches
- insomnia
- dizziness
- irritability
- fatigue
- heart palpitations
- nausea
- loss of appetite
- feeling of discomfort
- loss of libido
- poor concentration
- memory loss
- neuropsychiatric problems such as depression.

### Blood Cell Abnormalities Found

In a recent study from India by Zothansiyama et al (2017), researchers examined abnormalities in blood samples in people living at different distances from cell towers. They identified a significant increase blood cell damage in those living within 80 meters of a cell tower versus those living greater

than 300 meters from a cell tower. They found 1) A significant increase in micronuclei, which are small remnants of DNA nuclear material appearing within blood cells and a sensitive indicator of genotoxicity and chromosomal abnormalities 2) An increase in lipid peroxidation indicating free radical formation and cell membrane damage 3) A reduction in levels of internally produced antioxidant capacity (glutathione, catalase and superoxide dismutase).

The author concluded **“The present study demonstrated that staying near the mobile base stations and continuous use of mobile phones damage the DNA, and it may have an adverse effect in the long run. The persistence of DNA unrepaired damage leads to genomic instability which may lead to several health disorders including the induction of cancer.”** As more base stations are deployed with higher density and with ubiquitous wireless devices at home it will be difficult to find control groups that have not been significantly exposed. The *Antenna Search* website allows people to identify registered cell towers in their area.

Blake Levitt, an award-winning medical and science journalist and former *New York Times* contributor is author of **Cell Towers-Wireless Convenience? or Environmental Hazard? (2000)** The book lists different chapters from different authors who contributed to a “Cell Towers Forum: State of the Science/State of the law” environmental conference December 2, 2000. Her book has valuable information on FCC safety guidelines, legal aspects of the Telecommunications Act, cell tower sitings and case law.

### **Conclusions From Research**

A brief review of some of the research listed is below. Wildlife is even effected by cell towers.

**Santini, in 2002** French study, reported an increase in fatigue at 300 meters from the cell towers and remaining symptoms at 200 meters. A follow up study by Santini in 2003 revealed that older subjects reported more symptoms and were more sensitive. Duration of exposure of 1 to 5 years did not have an effect on frequency of symptoms but after 5 years there was a significant increase in irritability reported.

**Navarro in 2003** indicates much lower levels of exposure cause adverse health symptoms. The Navarro (2003) [study](#) on cell towers and “Microwave Syndrome” in Spain found that in those living near cell towers symptoms occurred at low power. He looked at distance from the towers and electromagnetic field exposures and concluded, ” Based on the data of this study the [advice](#) would be to **strive for levels not higher than** 0.02 V/m for the sum total, which is equal to **a power density of 0.0001  $\mu$ W/cm<sup>2</sup> or 1  $\mu$ W/m<sup>2</sup>**, which is the indoor exposure value for GSM base stations proposed on empirical evidence by the Public Health Office of the Government of Salzburg in 2002.”

**Wolf and Wolf , in 2004** investigated the rates of cancer versus distance from cell towers in small towns in Israel. He found the rate of cancer incidence was 129 cases per 10,000 persons per year in those living within 350 meters of a cell tower versus a rate of 16-31/10,000 in those living greater than 350 meters from the cell tower. **Eger et al. in 2004** also found an increase in the development of new cancer cases within a 10 year period if residents lived within 400 meters of a cell tower. Their results revealed that within 5 years of operation of a transmitting station the relative risk of cancer development tripled in residents near the cell towers compared to residents outside the area.

**Hutter 2006**– In an Austrian study, **Hutter in 2006** looked at cognitive performance, insomnia and well being in relation to power density of radiofrequency radiation versus reported symptoms in those

in rural vs urban settings for more than a year. His study showed an increase in health effects with higher radiofrequency exposure. Important conclusions were that these complaints were independent of patients concern over health effects and that at levels well below current safety standards.

**Shinjo and Shinjo in 2014-** In an independent cell tower study from Japan, published in 2014, researchers **Shinjo and Shinjo** looked at health effects of residents living in a condominium complex from 1998-2009, noting health symptoms before placement of cell towers, during cell tower functioning and after removal of different antennas on the rooftops. They found a significant development of symptoms with placement of the cell towers and a significant reduction in symptoms after removal. The most frequent symptoms were fatigue, loss of motivation, headaches, eye pain, deteriorated eyesight, sleep disturbances, dizziness, jitteriness, rapid heart rate, muscle aches and nasal bleeding.

## Published Literature

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- **[Increased occurrence of nuclear cataract in the calf after erection of a mobile phone base station].** [Hässig M1](#), [Jud F](#), [Spiess B](#). *Schweiz Arch Tierheilkd.* 2012 Feb;154(2):82-6. <https://www.ncbi.nlm.nih.gov/pubmed/22287140>
- **Mortality by neoplasia and cellular telephone base stations in the Belo Horizonte municipality, Minas Gerais state, Brazil. (2011)** A Dode et al. *Science of The Total Environment.* [Volume 409, Issue 19](#) react-text: 71 , /react-text react-text: 72 1 September



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From Saferemr.org  
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**Impact of radiofrequency radiation on DNA damage and antioxidants in peripheral blood lymphocytes of humans residing in the vicinity of mobile phone base stations**

Zothansiyama, Zosangzuali M, Lalramdinpui M, Jagetia GC. Impact of radiofrequency radiation on DNA damage and antioxidants in peripheral blood lymphocytes of humans residing in the vicinity of mobile phone base stations. *Electromagn Biol Med.* 2017 Aug 4:1-11. doi: 10.1080/15368378.2017.1350584.

Abstract

Radiofrequency radiations (RFRs) emitted by mobile phone base stations have raised concerns on its adverse impact on humans residing in the vicinity of mobile phone base stations. Therefore, the present study was envisaged to evaluate the effect of RFR on the DNA damage and antioxidant status in cultured human peripheral blood lymphocytes (HPBLs) of individuals residing in the vicinity of mobile phone base stations and comparing it with healthy controls. The study groups matched for various demographic data including age, gender, dietary pattern, smoking habit, alcohol consumption, duration of mobile phone use and average daily mobile phone use.

The RF power density of the exposed individuals was significantly higher ( $p < 0.0001$ ) when compared to the control group. The HPBLs were cultured and the DNA damage was assessed by cytokinesis blocked micronucleus (MN) assay in the binucleate lymphocytes. The analyses of data from the exposed group ( $n = 40$ ), residing within a perimeter of 80 meters of mobile base stations, showed significantly ( $p < 0.0001$ ) higher frequency of micronuclei (MN) when compared to the control group, residing 300 meters away from the mobile base station/s.

The analysis of various antioxidants in the plasma of exposed individuals revealed a significant attrition in glutathione (GSH) concentration ( $p < 0.01$ ), activities of catalase (CAT) ( $p < 0.001$ ) and superoxide dismutase (SOD) ( $p < 0.001$ ) and rise in lipid peroxidation (LOO) when compared to controls. Multiple linear regression analyses revealed a significant association among reduced GSH concentration ( $p < 0.05$ ), CAT ( $p < 0.001$ ) and SOD ( $p < 0.001$ ) activities and elevated MN frequency ( $p < 0.001$ ) and LOO ( $p < 0.001$ ) with increasing RF power density.

<https://www.ncbi.nlm.nih.gov/pubmed/28777669>

My note

All of the recorded RFR power density values in this study were well below the Federal Communication Commission's maximum permissible exposure limits in the U.S. for the general population. These limits are 6,000 mW/m<sup>2</sup> [milliwatts per square meter] for 900 MHz and 10,000 mW/m<sup>2</sup> for 1800 MHz radiofrequency radiation. In contrast, the highest recorded value in this study was 7.52 mW/m<sup>2</sup> of RFR. The "exposed individuals" who resided within 80 meters of a cell antenna received an average of 5.00 mW/m<sup>2</sup> of RFR in their bedrooms.

Excerpts

RFR may change the fidelity of DNA as the increased incidence of cancer has been reported among those residing near mobile phone base stations (Abdel-Rassoul et al., 2007; Bortkiewicz

et al., 2004; Cherry, 2000; Eger et al., 2004; Hardell et al., 1999; Hutter et al., 2006; Wolf and Wolf, 2004). RFR emitted from mobile base stations is also reported to increase the DNA strand breaks in lymphocytes of mobile phone users and individuals residing in the vicinity of a mobile base station/s (Gandhi and Anita, 2005; Gandhi et al., 2014). Exposure of human fibroblasts and rat granulosa cells to RFR (1800 MHz, SAR 1.2 or 2 W/kg) has been reported to induce DNA single- and double-strands breaks (Diem et al., 2005). Irreversible DNA damage was also reported in cultured human lens epithelial cells exposed to microwave generated by mobile phones (Sun et al., 2006). The adverse health effects of RFR are still debatable as many studies indicated above have found a positive correlation between the DNA damage and RFR exposure; however, several studies reported no significant effect of RFR on DNA strand breaks and micronuclei formation in different study systems (Li et al., 2001; Tice et al., 2002; McNamee et al., 2003; Maes et al., 2006). The potential genotoxicity of RFR emitted by mobile phone base stations can be determined by micronucleus (MN) assay, which is an effective tool to evaluate the genotoxic or clastogenic effects of physical and chemical agents. This technique has also been used to quantify the frequencies of radiation-induced MN in human peripheral blood lymphocytes (HPBLs) (Fenech and Morley, 1985; Jagetia and Venkatesha, 2005; Prosser et al., 1988; Yildirim et al., 2010).

Six mobile phone base stations, operating in the frequency range of 900 MHz (N = 2) and 1800 MHz (N = 4), erected in the thickly populated areas of Aizawl city were selected for the present study... The power output of all the base stations is 20 W, with their primary beam emitting radiation at an angle of 20°. Power density measurements (using HF-60105V4, Germany) were carried out in the bedroom of each participant where they spent most of the time and hence have the longest constant level of electromagnetic field exposure. Power density measurement was carried out three times (morning, midday and evening), and the average was calculated for each residence around each base station. The main purpose of the measurement of power density was to ensure that RFR emission from each site did not exceed the safe public limits and to determine any difference in power density between selected households that were close to (within 80 m) and far (>300 m) from the mobile phone base stations. The safety limits for public exposure from mobile phone base stations are 0.45 W/m<sup>2</sup> for 900 MHz and 0.92 W/m<sup>2</sup> for 1800 MHz frequency as per Department of Telecommunications, Ministry of Communications, Government of India, New Delhi guidelines (DoT, 2012).

... some residences are located horizontally with the top of the towers from which RFR are emitted, making it possible to get an exposure at a short distance of 1–20 m, despite being erected on the rooftop or in the ground. A minimum of two individuals were sampled from each household and at least five individuals were sampled around each mobile base station. Individuals sampled around each base station were matched for their age and gender (Table 1). The exposed group consisted of 40 healthy individuals who fulfilled the inclusion criteria of being above 18 years of age and residing in the vicinity of mobile phone base stations (within 80 m radius). The control group comprised of 40 healthy individuals matched for age and gender who had been living at least 300 m away from any mobile phone base stations.... Sampling was also done only from those residences who did not use microwave oven for cooking, Wifi devices and any other major source of electromagnetic field as they are known to cause adverse effects (Atasoy et al., 2013; Avendaño et al., 2012).

The groups matched for most of the demographic data such as age, gender, dietary pattern, smoking habit, alcohol consumption, mobile phone usage, duration of mobile phone use and average daily mobile phone use (Table 2). A highly significant variation ( $p < 0.0001$ ) was observed for the distance of household from the base station ( $40.10 \pm 3.02$  vs.  $403.17 \pm 7.98$  in m) between exposed and control groups.

The RF power density of the exposed group ( $2.80\text{--}7.52$  mW/m<sup>2</sup>; average  $5.002 \pm 0.182$  mW/m<sup>2</sup>) was significantly higher ( $p < 0.0001$ ) when compared to the control group ( $0.014\text{--}0.065$  mW/m<sup>2</sup>; average  $0.035 \pm 0.002$  mW/m<sup>2</sup>). The highest power density was recorded at a distance of 1–20 m

( $6.44 \pm 0.31$  mW/m<sup>2</sup>), which is significantly higher ( $p < 0.0001$ ) than those at a distance of 21–40 m ( $4.79 \pm 0.33$ ), 41–60 m ( $4.48 \pm 0.22$ ) and 61–80 m ( $4.61 \pm 0.10$ ).

The highest measured power density was 7.52mW/m<sup>2</sup>. Most of the measured values close to base stations (Table 1) are higher than that of the safe limits recommended by Bioinitiative Report 2012 (0.5mW/m<sup>2</sup>), Salzburg resolution 2000 (1 mW/m<sup>2</sup>) and EU (STOA) 2001 (0.1 mW/m<sup>2</sup>). However, all the recorded values were well below the current ICNIRP safe level (4700 mW/m<sup>2</sup>) and the current Indian Standard (450 mW/m<sup>2</sup>).

The exact mechanism of action of RFR in micronuclei induction and reduced antioxidant status is not apparent. The possible putative mechanism of generation of DNA damage may be the production of endogenous free radicals due to continuous exposure. RFR has been reported to produce different free radicals earlier (Avci et al., 2009; Burlaka et al., 2013; Barcal et al., 2014; Kazemi et al., 2015). Cells possess a number of compensatory mechanisms to deal with ROS and its effects. Among these are the induction of antioxidant proteins such as GSH, SOD and CAT. Enzymatic antioxidant systems function by direct or sequential removal of ROS, thereby terminating their activities. An imbalance between the oxidative forces and antioxidant defense systems causes oxidative injury, which has been implicated in various diseases, such as cancer, neurological disorders, atherosclerosis, diabetes, liver cirrhosis, asthma, hypertension and ischemia (Andreadis et al., 2003; Comhair et al., 2005; Dhalla et al., 2000; Finkel and Holbrook, 2000; Kasparova et al., 2005; Sayre et al., 2001; Sohal et al., 2002). Because of the significant decrease in endogenous antioxidants and increased LOO among the exposed group, the extra burden of free radicals is unlikely to get neutralized, and these surplus ROS may react with important cellular macromolecules including DNA forming either DNA adducts or strand breaks, which may be later expressed as micronuclei once the cell decides to divide. The decline in the antioxidant status may be also due to the suppressed activity of Nrf2 transcription factor which is involved in maintaining the antioxidant status in the cells.

The present study has reported that [radiofrequency radiation] increased the frequency of [micronuclei] and [lipid peroxidation] and reduced [glutathione] contents, [catalase] and [superoxide dismutase] activities in the plasma of the exposed individuals. The induction of [micronuclei] may be due to the increase in free-radical production. The present study demonstrated that staying near the mobile base stations and continuous use of mobile phones damage the DNA, and it may have an adverse effect in the long run. The persistence of DNA unrepaired damage leads to genomic instability which may lead to several health disorders including the induction of cancer.

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### **Biological effects from exposure to electromagnetic radiation emitted by cell tower base stations and other antenna arrays**

Levitt BB, Lai H. Biological effects from exposure to electromagnetic radiation emitted by cell tower base stations and other antenna arrays. *Environmental Reviews*.18: 369–395 (2010) doi:10.1139 /A10-018.

Open Access Paper:

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#### **Abstract**

The siting of cellular phone base stations and other cellular infrastructure such as roof-mounted antenna arrays, especially in residential neighborhoods, is a contentious subject in land-use regulation. Local resistance from nearby residents and landowners is often based on fears of



adverse health effects despite reassurances from telecommunications service providers that international exposure standards will be followed.

Both anecdotal reports and some epidemiology studies have found headaches, skin rashes, sleep disturbances, depression, decreased libido, increased rates of suicide, concentration problems, dizziness, memory changes, increased risk of cancer, tremors, and other neurophysiological effects in populations near base stations.

The objective of this paper is to review the existing studies of people living or working near cellular infrastructure and other pertinent studies that could apply to long-term, low-level radiofrequency radiation (RFR) exposures. While specific epidemiological research in this area is sparse and contradictory, and such exposures are difficult to quantify given the increasing background levels of RFR from myriad personal consumer products, some research does exist to warrant caution in infrastructure siting. Further epidemiology research that takes total ambient RFR exposures into consideration is warranted.

Symptoms reported today may be classic microwave sickness, first described in 1978. Nonionizing electromagnetic fields are among the fastest growing forms of environmental pollution. Some extrapolations can be made from research other than epidemiology regarding biological effects from exposures at levels far below current exposure guidelines.

### **Excerpts**

[Note: As of July 9, 2017, [www.antennasearch.com](http://www.antennasearch.com), an industry website, reports 646,000 towers and 1.89 million cell antennas in the U.S.]

In lieu of building new cell towers, some municipalities are licensing public utility poles throughout urban areas for Wi-Fi antennas that allow wireless Internet access. These systems can require hundreds of antennas in close proximity to the population with some exposures at a lateral height where second- and third-story windows face antennas. Most of these systems are categorically excluded from regulation by the U.S. Federal Communications Commission (FCC) or oversight by government agencies because they operate below a certain power density threshold. However, power density is not the only factor determining biological effects from radiofrequency radiation (RFR).

An aesthetic emphasis is often the only perceived control of a municipality, particularly in countries like America where there is an overriding federal preemption that precludes taking the “environmental effects” of RFR into consideration in cell tower siting as stipulated in Section 704 of *The Telecommunications Act of 1996* (USFCC 1996). Citizen resistance, however, is most often based on health concerns regarding the safety of RFR exposures to those who live near the infrastructure. Many citizens, especially those who claim to be hypersensitive to electromagnetic fields, state they would rather know where the antennas are and that hiding them greatly complicates society’s ability to monitor for safety.

Industry representatives try to reassure communities that facilities are many orders of magnitude below what is allowed for exposure by standards-setting boards and studies bear that out ([Cooper et al. 2006](#); [Henderson and Bangay 2006](#); [Bornkessel et al. 2007](#)). These include standards by the International Commission on Non-Ionizing Radiation Protection (ICNIRP) used throughout Europe, Canada, and elsewhere ([ICNIRP 1998](#)). The standards currently adopted by the U.S. FCC, which uses a two-tiered system of recommendations put out by the National Council on Radiation Protection (NCRP) for civilian exposures (referred to as uncontrolled



environments), and the International Electricians and Electronics Engineers (IEEE) for professional exposures (referred to as controlled environments) ([U.S. FCC 1997](#)). The U.S. may eventually adopt standards closer to ICNIRP. The current U.S. standards are more protective than ICNIRP's in some frequency ranges so any harmonization toward the ICNIRP standards will make the U.S. limits more lenient.

All of the standards currently in place are based on RFRs ability to heat tissue, called thermal effects. A longstanding criticism, going back to the 1950s ([Levitt 1995](#)), is that such acute heating effects do not take potentially more subtle non-thermal effects into consideration. And based on the number of citizens who have tried to stop cell towers from being installed in their neighborhoods, laypeople in many countries do not find adherence to existing standards valid in addressing health concerns. Therefore, infrastructure siting does not have the confidence of the public ([Levitt 1998](#)).

The intensity of RFR decreases rapidly with the distance from the emitting source; therefore, exposure to RFR from transmission towers is often of low intensity depending on one's proximity. But intensity is not the only factor. Living near a facility will involve long-duration exposures, sometimes for years, at many hours per day. People working at home or the infirm can experience low-level 24 h exposures. Nighttimes alone will create 8 hour continuous exposures. The current standards for both ICNIRP, IEEE and the NCRP (adopted by the U.S. FCC) are for whole-body exposures averaged over a short duration (minutes) and are based on results from short-term exposure studies, not for long-term, low-level exposures such as those experienced by people living or working near transmitting facilities. For such populations, these can be involuntary exposures, unlike cell phones where user choice is involved.

The U.S. FCC has issued guidelines for both power density and SARs. For power density, the U.S. guidelines are between 0.2–1.0 mW/cm<sup>2</sup>....

At 100–200 ft (about 30–60 meters) from a cell phone base station, a person can be exposed to a power density of 0.001 mW/cm<sup>2</sup> (i.e., 1.0 μW/cm<sup>2</sup>)....

For the purposes of this paper, we will define low-intensity exposure to RFR of power density of 0.001 mW/cm<sup>2</sup>

Many biological effects have been documented at very low intensities comparable to what the population experiences within 200 to 500 ft (~60–150 m) of a cell tower, including effects that occurred in studies of cell cultures and animals after exposures to low-intensity RFR. Effects reported include: genetic, growth, and reproductive; increases in permeability of the blood–brain barrier; behavioral; molecular, cellular, and metabolic; and increases in cancer risk....

Ten years ago, there were only about a dozen studies reporting such low-intensity effects; currently, there are more than 60. This body of work cannot be ignored. These are important findings with implications for anyone living or working near a transmitting facility. However, again, most of the studies in the list are on short-term (minutes to hours) exposure to low-intensity RFR. Long-term exposure studies are sparse. In addition, we do not know if all of these reported effects

occur in humans exposed to low-intensity RFR, or whether the reported effects are health hazards. Biological effects do not automatically mean adverse health effects, plus many biological effects are reversible. However, it is clear that low-intensity RFR is not biologically inert. Clearly, more needs to be learned before a presumption of safety can continue to be made regarding placement of antenna arrays near the population, as is the case today.

... The previously mentioned studies show that RFR can produce effects at much lower intensities after test animals are repeatedly exposed. This may have implications for people exposed to RFR from transmission towers for long periods of time.

... The conclusion from this body of work is that effects of long-term exposure can be quite different from those of short-term exposure.

Since most studies with RFR are short-term exposure studies, it is not valid to use their results to set guidelines for long-term exposures, such as in populations living or working near cell phone base stations.

Numerous biological effects do occur after short-term exposures to low-intensity RFR but potential hazardous health effects from such exposures on humans are still not well established, despite increasing evidence as demonstrated throughout this paper. Unfortunately, not enough is known about biological effects from long-term exposures, especially as the effects of long-term exposure can be quite different from those of short-term exposure. It is the long-term, low-intensity exposures that are most common today and increasing significantly from myriad wireless products and services.

People are reporting symptoms near cell towers and in proximity to other RFR-generating sources including consumer products such as wireless computer routers and Wi-Fi systems that appear to be classic “microwave sickness syndrome,” also known as “radiofrequency radiation sickness.” First identified in the 1950s by Soviet medical researchers, symptoms included headache, fatigue, ocular dysfunction, dizziness, and sleep disorders. In Soviet medicine, clinical manifestations include dermatographism, tumors, blood changes, reproductive and cardiovascular abnormalities, depression, irritability, and memory impairment, among others. The Soviet researchers noted that the syndrome is reversible in early stages but is considered lethal over time ([Tolqskaya et al. 1973](#)).

The present U.S. guidelines for RFR exposure are not up to date. The most recent IEEE and NCRP guidelines used by the U.S. FCC have not taken many pertinent recent studies into consideration because, they argue, the results of many of those studies have not been replicated and thus are not valid for standards setting. That is a specious argument. It implies that someone tried to replicate certain works but failed to do so, indicating the studies in question are unreliable. However, in most cases, no one has tried to exactly replicate the works at all.... In addition, effects of long-term exposure, modulation, and other propagation characteristics are not considered. Therefore, the current guidelines are questionable in protecting the public from possible harmful effects of RFR exposure and the U.S. FCC should take steps to update their regulations by taking all recent research into consideration without waiting for replication that may never come because of the scarcity of research funding. The ICNIRP standards are more lenient in key exposures to the population than current U.S. FCC regulations. The U.S. standards should not be “harmonized” toward more lenient allowances. The ICNIRP should become more

protective instead. All standards should be biologically based, not dosimetry based as is the case today.

Exposure of the general population to RFR from wireless communication devices and transmission towers should be kept to a minimum and should follow the “As Low As Reasonably Achievable” (ALARA) principle. Some scientists, organizations, and local governments recommend very low exposure levels — so low, in fact, that many wireless industries claim they cannot function without many more antennas in a given area. However, a denser infrastructure may be impossible to attain because of citizen unwillingness to live in proximity to so many antennas. In general, the lowest regulatory standards currently in place aim to accomplish a maximum exposure of 0.02 V/m, equal to a power density of 0.0001  $\mu\text{W}/\text{cm}^2$ , which is in line with Salzburg, Austria’s indoor exposure value for GSM cell base stations. Other precautionary target levels aim for an outdoor cumulative exposure of 0.1  $\mu\text{W}/\text{cm}^2$  for pulsed RF exposures where they affect the general population and an indoor exposure as low as 0.01  $\mu\text{W}/\text{cm}^2$  ([Sage and Carpenter 2009](#)). In 2007, *The BioInitiative Report, A rationale for a biologically based public exposure standard for electromagnetic fields (ELF and RF)*, also made this recommendation, based on the precautionary principle ([Bioinitiative Report 2007](#)).

Citizens and municipalities often ask for firm setbacks from towers to guarantee safety. There are many variables involved with safer tower siting — such as how many providers are co-located, at what frequencies they operate, the tower’s height, surrounding topographical characteristics, the presence of metal objects, and others. Hard and fast setbacks are difficult to recommend in all circumstances. Deployment of base stations should be kept as efficient as possible to avoid exposure of the public to unnecessary high levels of RFR. As a general guideline, cell base stations should not be located less than 1500 ft (~500 m) from the population, and at a height of about 150 ft (~50 m). Several of the papers previously cited indicate that symptoms lessen at that distance, despite the many variables involved. However, with new technologies now being added to cell towers such as Wi-Max networks, which add significantly more power density to the environment, setback recommendations can be a very unpredictable reassurance at best. New technology should be developed to reduce the energy required for effective wireless communication.

In addition, regular RFR monitoring of base stations should be considered....

**Table 1.** List of studies reporting biological effects at low intensities of radiofrequency radiation (RFR).

Reference	Frequency	Form of RFR	Exposure duration	SAR (W/kg)	Power density ( $\mu\text{W}/\text{cm}^2$ )
Balmori (2010) (in vivo) (eggs and tadpoles of frog)	88.5–1873.6 MHz	Cell phone base station emission	2 months		3.25
Belyaev et al. (2005) (in vitro)	915 MHz	GSM	24, 48 h	0.037	
Belyaev et al. (2009) (in vitro)	915 MHz, 1947 MHz	GSM, UMTS	24, 72 h	0.037	
Blackman et al. (1980) (in vitro)	50 MHz	AM at 16 Hz		0.0014	
Boscol et al. (2001) (in vivo) (human whole body)	500 KHz–3 GHz	TV broadcast			0.5
Campisi et al. (2010) (in vitro)	900 MHz	CW (CW– no effect observed)	14 days, 5, 10, 20 min per day		26
Capri et al. (2004) (in vitro)	900 MHz	AM at 50 Hz GSM	1 h/day, 3 days	0.07	
Chiang et al. (1989) (in vivo) (human whole body)	Lived and worked close to AM radio and radar installations for more than 1 year				10
de Pomerai et al. (2003) (in vitro)	1 GHz		24, 48 h	0.015	
D’Inzeo et al. (1988) (in vitro)	10.75 GHz	CW	30–120 s	0.008	
Dutta et al. (1984) (in vitro)	915 MHz	Sinusoidal AM at 16 Hz	30 min	0.05	
Dutta et al. (1989) (in vitro)	147 MHz	Sinusoidal AM at 16 Hz	30 min	0.005	
Fesenko et al. (1999) (in vivo) (mouse- wavelength in mm range)	From 8.15–18 GHz		5 h to 7 days direction of response depended on exposure duration		1
Forgacs et al. (2006) (in vivo) (mouse whole body)	1800 MHz	GSM, 217 Hz pulses, 576 $\mu\text{s}$ pulse width	2 h/day, 10 days	0.018	
Guler et al. (2010) (in vivo) (rabbit whole body)	1800 MHz	AM at 217 Hz	15 min/day, 7 days		52
Hjollund et al. (1997) (in vivo) (human partial or whole body)	Military radars				10
Ivaschuk et al. (1997) (in vitro)	836.55 MHz	TDMA	20 min	0.026	
Jech et al. (2001) (in vivo) (human partial body exposure- narcoleptic patients)	900 MHz	GSM— 217 Hz pulses, 577 $\mu\text{s}$ pulse width	45 min	0.06	
Kesari and Behari (2009) (in vivo) (rat whole body)	50 GHz		2 h/day, 45 days	0.0008	
Kesari and Behari (2010) (in vivo) (rat whole body)	50 GHz		2 h/day, 45 days	0.0008	
Kesari et al. (2010) (in vivo) (rat whole body)	2450 MHz	50 Hz modulation	2 h/day, 35 days	0.11	
Kwee et al. (2001) (in vitro)	960 MHz	GSM	20 min	0.0021	
Lebedeva et al. (2000) (in vivo) (human partial body)	902.4 MHz	GSM	20 min		60
Lerchl et al. (2008) (in vivo) (hamster whole body)	383 MHz 900 and 1800 MHz	TETRA GSM	24 h/day, 60 days	0.08	
Magras and Xenos (1997) (in vivo) (mouse whole body)	“Antenna park”	TV and FM-radio	Exposure over several generations		0.168

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Center for Municipal Solutions. Excellent resource re: regulation of cell towers & wireless facilities. <http://bit.ly/1GX4mPY>

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"Stating that the current level of radiation (electromagnetic field, EMF) emitted by mobile phone towers was still high, Girish Kumar, Professor, Department of Electrical Engineering, IIT Bombay, on Saturday, urged the Centre to reduce the radiation level further.

The mobile tower radiation had been reduced [in India] from 45,000 milliwatt per square metre to 450 milliwatt a few years ago. It should be reduced to 10 milliwatt, he said ...."

Note: The FCC allows the American general public to be exposed to up to 5,800 milliwatts per square meter.

Lydia Beyoud. Not All 'Small Cells' Created Equal, Say Municipalities in Wireless Siting Rules Suit. Bloomberg BNA. Apr 27, 2015.

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# Strong Opposition to 5G Halts Small Cell Bill in Montgomery County Maryland & Verizon Drops Applications in Burlington

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*Update from the East Coast on 5G*

## **Strong Opposition to 5G Halts Small Cell Bill in Montgomery County Maryland**

### **Verizon Withdraws Small Cell Applications in Burlington, Massachusetts after Small Cell Recertification Requirements Established**

(Montgomery County MD) Strong opposition finally halted a proposed a zoning amendment that would enable 5G small cells in close proximity to homes in Montgomery County Maryland neighborhoods. Citizens, medical experts and community organizations worked in coalition raising concerns about health, environment, property values and aesthetics after the measure was put forward. They testified in [public hearings](#) and objected most to the provision that citizen's rights to a public notice and hearing would have been removed if a utility pole were in the front of their homes

The Montgomery County 5G Small Cell zoning amendment was being pushed by the Montgomery County Executive Ike Leggett (who notable had previously states that cell towers were bad for the environment), County Council President Riemer and Councilwoman Nancy Floreen.

In the final Council deliberations Montgomery County Councilman Hucker brought forward an amendment to the regulation that would give public notice and hearings to homeowners with a utility pole in front of their homes. The County staff told him this was not allowed under law and that the county would be preempted. However Councilman Hucker the [presented](#) documentation that in fact the county had the authority to regulate both the approval procedure and the setbacks for small wireless facilities to be placed in its ROW and in residential zones.

The Council was set to vote on the complete amendment at the next meeting and to discuss another proposed amendment that would ban small cells near schools. However, the Council President then removed the vote and discussion from the next Council meeting and issued a statement that, "Unfortunately amendments were introduced that essentially sought to obstruct deployment of wireless infrastructure in the future."

Thus, the passing of the amendment that gave citizens notice and a hearing tainted the otherwise industry friendly bill and was no longer acceptable to industry as it would have forced them to give public notice and hearings.

The Washington Post article, "[Montgomery County lawmakers cancel vote on 'small cell' bill to regulate 5G network](#)" headlines that "The council couldn't agree on how close to allow antennas and equipment to be installed near homes."

(From Cecelia Doucette in Ashland Massachusetts) Meanwhile in Burlington, Massachusetts, Verizon withdrew their small cell applications upon learning of newly established annual recertification requirement and associated fees as they did not wish to establish a precedent for recertification fees.

The Burlington, Massachusetts Small Cells Committee had proactively developed criteria in a new policy for reviewing small cell applications which included an annual recertification of equipment installations, with a fee assessed to the telecommunications vendor to pay for town employee time to oversee the recertification process. The town established a website to share with the public each of the small cell applications, letters of concern, staff comments and reports.

**Burlington Cable Access Television covered the story at [“Verizon Drops Small Cell Wireless Booster Application in Face of Fees”](#)**

### **LEARN MORE ABOUT 5G**

Get the Facts on 5g at [EHT’s 20 Quick Facts About 5G](#) to get updated on the issues.

Download a PDF of [EHT Factsheet on 5G and Health](#). The factsheet is hyperlinked (blue text) to research and sources. It is a great resource for policymakers. [Read the research on 5G and health here.](#)

What is the alternative? A safe wired solution is the future. Read [“Re-Inventing Wires: The Future of Landlines and Networks”](#).

Read also [“WIRELESS SILENT SPRING” BY CINDY RUSSELL, MD.](#) in Santa Clara Medical Association Magazine.

Briefing by Dr. Martin Pall: [“5G: Great risk for EU, U.S. and International Health! Compelling Evidence for Eight Distinct Types of Great Harm Caused by Electromagnetic Field\(EMF\) Exposures and the Mechanism that Causes Them”](#)





## **CELL PHONE RADIATION FAQ'S**



## **WIFI IN SCHOOLS**



## **CELL PHONES AND BREAST CANCER**

**Town of Burlington Policy  
Applications for Small Cell Wireless Installations**

The Town of Burlington (“Town”) by and through its Board of Selectmen hereby adopts this policy (“Policy”) concerning Applications for Small Cell Wireless installations within the public right of way of the Town or located on Town- owned property.

1. Application Process.

- a. Applications shall be submitted to the Board of Selectmen through the Office of the Town Administrator accompanied by the application fee of \$500 per application, payable to the Town of Burlington. The \$500 fee will cover up to 5 locations. Each application for more than 5 installations is subject to a separate fee of \$100 per installation.
- b. The applicant must also pay for legal notices of the public hearing to local newspapers and abutters, as applicable. The applicant is responsible for obtaining the abutters list for each pole location within the application.
- c. 12 (12) hard copies of the application and 1 (one) electronic copy of the application must be submitted to the Office of the Town Administrator. No application will be accepted for review until all items listed in 2, below, have been submitted, as well as all fees and the abutters list paid for.
- d. Upon receipt, the Office of the Town Administrator shall: (1) date and time stamp the Application as received; and (2) make a determination as to completeness of the application and notify the Applicant, in writing, within 10 days, if the application is incomplete. If the Applicant is notified that the application is incomplete, the time periods set forth in this Policy shall be tolled until such time as a complete application has been submitted.
- e. The Office of the Town Administrator shall also circulate a copy of the application to the following departments for comment and review: Building; Engineering; Planning; Health; and, any other department the Town Administrator, in his or her sole discretion, determines.
- f. Written comments from the departments shall be submitted to the Office of the Town Administrator within 20 days of circulation of the application.
- g. Once the application is deemed complete, and all comments have been received, the Board of Selectmen will schedule and hold a public hearing to consider the application, such that a determination may be made on any application for an installation on an existing structure within 60 days of receipt of the application, and on a new structure, within 90 days of receipt of the application.
- h. Any material changes to an application, as determined by the Town in its sole discretion, shall constitute a new application for the purposes of the time standards. Where a changed or new application is submitted, the prior application shall be deemed withdrawn.
- i. Upon completion of the hearing, the Board of Selectmen may grant, grant with conditions, or deny the application, based on inadequate capacity of the pole or

mounting structure, safety concerns, reliability concerns, or failure to meet applicable engineering standards.

- j. Any approval granted to an applicant shall be only for the specific applicant and application. Any change in the name/carrier or sistered service provided by another carrier or small cell wireless location will require a new application and approval from the Town.

2. Content of Applications. Applications shall include the following information:

- a. Applicant's name, address, telephone number and email address.
- b. Names, addresses, telephone numbers, and email addresses of anyone acting on behalf of the Applicant with respect to the application.
- c. Detailed drawings and descriptions of the equipment to be installed, whether mounted on poles or on the ground, or otherwise, including:
  - i. Type of equipment
  - ii. Specifications of equipment (including but not limited to dimensions and weight)
  - iii. Equipment mount type and material
  - iv. Power source or sources for equipment, including necessary wires, cables, and conduit
  - v. Expected life of equipment
  - vi. Coverage area of equipment, including:
    - 1. Amount of antennas
    - 2. Antenna model
    - 3. Antenna length
    - 4. RRU count and power
    - 5. Antenna height
    - 6. Typical coverage area radius
  - vii. Call capacity of equipment, including:
    - 1. Total RRUs
    - 2. Max bandwidth per RRU
    - 3. MIMO per RRU
    - 4. Backhaul rate per RRU
  - viii. Hardening, including:
    - 1. If there is battery backup
    - 2. If there is generator backup
    - 3. If there are multiple fiber paths to switch
  - ix. Rendering and elevation of equipment
- d. Detailed map with locations of the poles or other facility on which equipment is to be located, including specific pole identification number, if applicable, and the areas it will service.
- e. Detailed map showing existing and proposed small cell installations within 500 feet of the Application site.
- f. Certification by a registered professional engineer that the pole/or location will safely support the proposed equipment.

- g. Written consent of the pole or facility owner to the installation.
- h. Affidavit from a Radio Frequency Engineer outlining the network/network service requirements in Burlington and how the installations address that need in Burlington. Such affidavit should characterize the current level of coverage and how the desired installations will change the current level of coverage, through or with coverage maps, including current and proposed coverage, including a breakdown of “excellent” “good and “poor” reception areas, as set forth in section 8.4.5 of the Burlington Wireless Communication and Facilities provisions of the Burlington Zoning Bylaw.
- i. Insurance certificate.
- j. Description as to why the desired location is superior to other similar locations, from a community perspective, including:
  - i. Visual aspects
  - ii. Proximity to single family residences
- k. Description of efforts to co-locate the equipment on existing structures, poles, or towers which currently exist or are under construction. A good faith effort to co-locate is required and evidence of such efforts must be included within the application.
- l. An Affidavit from the applicant which certifies that it will maintain the installations in good repair and according to FCC standards, and will remove any installation not in such good repair, or not in use, within 60 days of being no longer in good repair or no longer in use.

### 3. Annual Re-Certification and Affidavit.

- a. Each year on July 1 the equipment owner shall submit an affidavit which shall list, by location, all small cell wireless installations it owns within the Town of Burlington by location, and shall certify: (1) each such installation that remains in use; (2) that such in use installations remain covered by insurance; and (3) each such installation which is no longer in use.
- b. The equipment owner shall pay an annual re-certification fee of \$270 per installation which remains in use.
- c. Any small cell wireless installation which is no longer in use shall be removed by the owner within 60 days of receipt of the annual re-certification affidavit, at the owner’s expense.
- d. Any small cell wireless installation which is not removed within 60 days after being listed as no longer in use in the annual re-certification affidavit shall be subject to a fine of \$100/day until such installation is removed.
- e. Where such annual re-certification has not been timely submitted, or equipment no longer in use has not been removed within the required 60-day period, no further applications for small cell wireless installations will be accepted by the Town until such time as the annual re-certification has been submitted and all fees and fines paid.

4. Prohibitions.

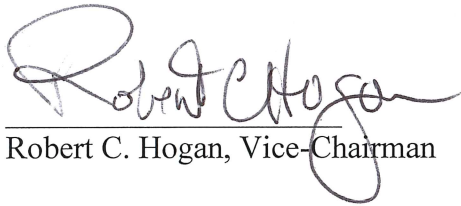
- a. No small cell wireless installations shall be installed on double poles.
- b. No small cell wireless installation shall be installed on poles which are not ADA compliant.
- c. No small cell wireless installations shall remain within the Town right of way or on Town property which has not been certified as in use in the annual re-certification affidavit.
- d. No small cell wireless installation equipment shall be replaced or altered without a re-application, hearing, and approval from the Board of Selectmen unless the equipment is no longer properly functioning, and it is being replaced with the same or substantially similar equipment.

Approved:

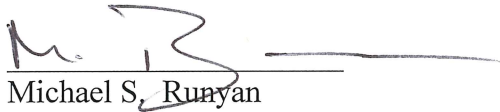
Board of Selectmen of the Town of Burlington



Christopher E. Hartling, Chairman



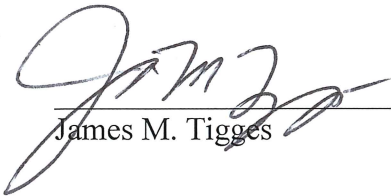
Robert C. Hogan, Vice-Chairman



Michael S. Runyan



Joseph E. Morandi



James M. Tigges

Dated: October 22, 2018



## PERMIT APPLICATION REQUIREMENTS

1) Create a new permit application specifically for telecommunications equipment. It should

include the following items on the permit application:

Name/address of installer

Name/address of equipment owner

Name/address of equipment operator

Name/address of any/all telecom corporations involved, or who will use this equipment now or in the future

List any/all related permits from other agencies such as MTA, MGSA, CPUC, etc.

List all computer/telecommunications hardware items to be installed, including all support equipment such as antennas, battery backup, smart meter, etc.

For each piece of hardware list the manufacturer name, model and version to be installed list each software version to be installed.

Ask for detailed specs on both sustained, and maximum, output levels, specified in units of both SAR and mW/m<sup>2</sup> measured at both 100' and 500', at 6 different points around the antenna (e.g. every 60 degrees around the antenna), and at different altitudes - ground, 5', 10', and at antenna height.

Answer question: Does hardware or software have the ability to upgrade its software automatically? If so how? And how will the city know if this has been done?

Answer question: Does hardware or software have the ability to modify output levels? If so how? And how will the city know if this has been done?

2) Establish additional conditions of the permit/process:

A) Each antenna/installation should be treated as a separate permit.

- Each permit will require notification to all neighbors within 3000' of the antenna.
- Each permit should be a separate line item on a city council or planning meeting agenda.
- No more than 5 permits will be considered at any single meeting.

B) Neither hardware nor software may be upgraded (automatically or otherwise) without having to go through a full permit review, including re-notification of all neighbors within 3000', plus another planning or council agenda item.

# FIBER OPTIC CABLE



# 5G WIRELESS



VS.

FIBER OPTIC CABLE IS A FASTER, BETTER, SAFER ALTERNATIVE THAN 5G WIRELESS

11-17-2018

MUST HAVE INTERNET CRITERIA	FIBER OPTIC CABLE	5G WIRELESS	5G WIRELESS COMMENTS
AESTHETIC SOLUTION	YES	NO	UNSIGHTLY CELL TOWERS EVERY 2-10 HOUSES
HEALTHY SOLUTION	YES	NO	LINKED TO CANCER & OTHER DISEASES
FIRE SAFETY	YES	NO	OVERLOADED POLES GO DOWN & SPARK FIRES
FIRE COMMUNICATION	YES	NO	POLES GO DOWN & BREAK COMMUNICATION
PRIVACY PROTECTED	YES	NO	SMALL CELL ANTENNAS MONITOR OCCUPANTS
PROPERTY VALUE IMPACT	3% INCREASE	-20% DECREASE	NAR SAYS 20% DROP NEXT TO CELL TOWERS
HIGHEST INTERNET SPEED	1 GB	100 MBPS	FIBER OPTIC CABLE IS 10X FASTER THAN 5G
LOWEST MONTHLY COST	\$40	\$100	5G WIRELESS IS TWICE THE COST
REVENUE CENTER FOR GOVT	YES	NO	FIBER OPTIC PUBLIC/PRIVATE PARTNERSHIP
ENERGY EFFICIENT GREEN SOLUTION	YES	NO	5G REQUIRES 900W TO TRANSMIT SIGNALS



# Zayo Fiber - Marin Co., CA

## Legend

- ▲ Feature 1
- Feature 2
- 🟠 ZAYO DARK FIBER - LONGHAUL - US-CANADA
- 🟢 ZAYO DARK FIBER METRO BACKBONE - US-CANADA
- 🟡 ZAYO DARK FIBER METRO LATERAL - US-CANADA

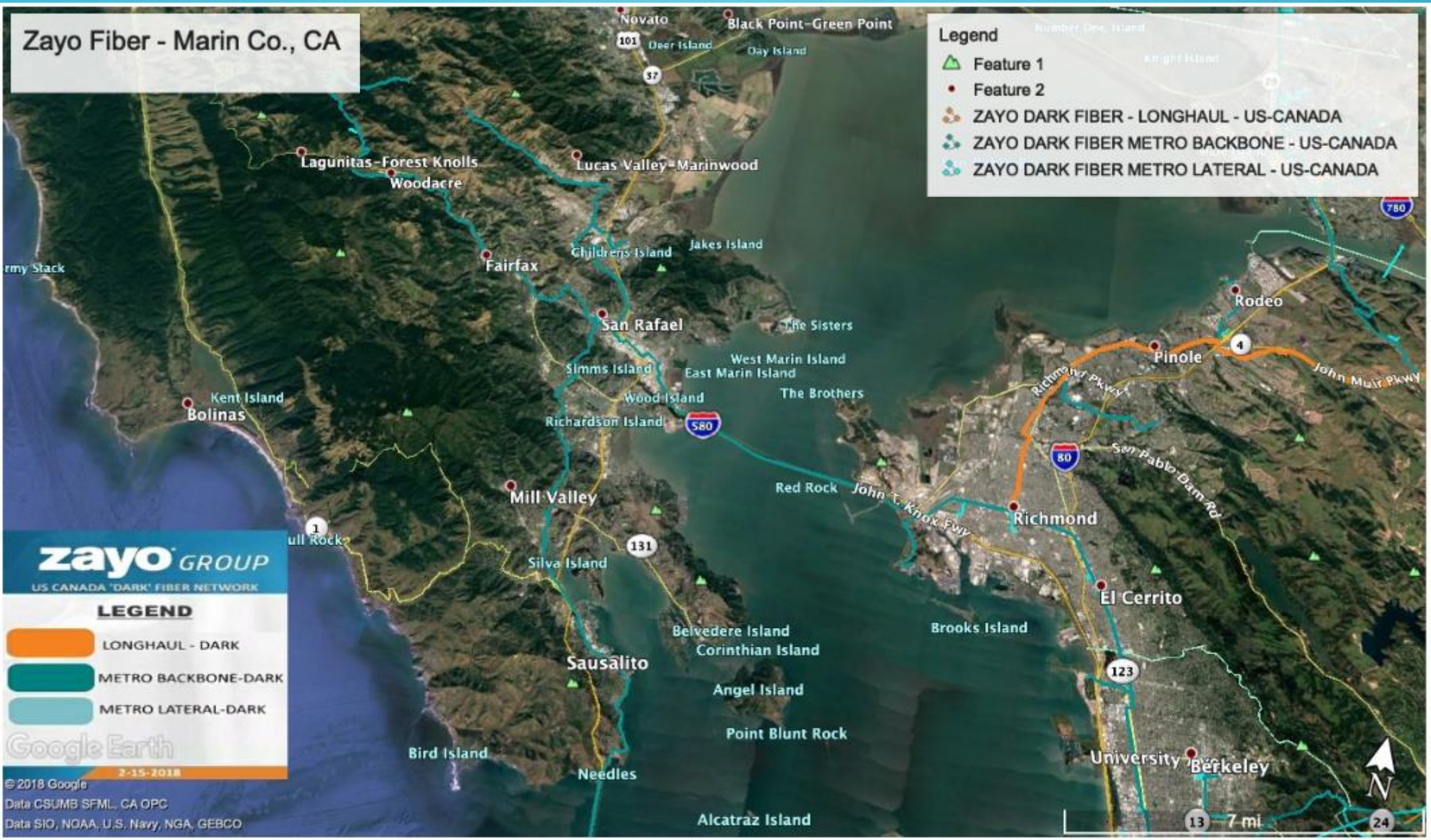
**zayo** GROUP  
US CANADA "DARK" FIBER NETWORK

**LEGEND**

- 🟠 LONGHAUL - DARK
- 🟢 METRO BACKBONE-DARK
- 🟡 METRO LATERAL-DARK

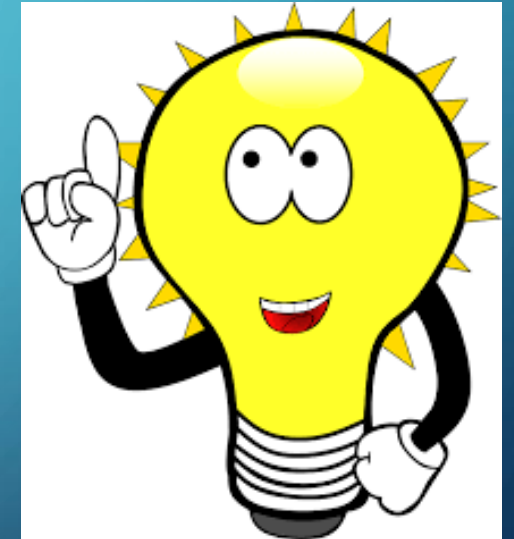
Google Earth  
2-15-2018

© 2018 Google  
Data CSUMB SFML, CA OPC  
Data SIO, NOAA, U.S. Navy, NGA, GEBCO



# WHAT ARE THE FOC BUILD-OUT OPTIONS? PART 2

- **Public/Private Partnership – Competitive RFP Model, Public Infrastructure = the Best Option**
  - Find a private partner that specializes in Public, Public/Private and competitive “access network/last mile” projects that can access the robust Marin “dark fiber” backbone already installed by carrier [Zayo Group](#) for Lucasfilm and other enterprises. The access network developer/operator does the lateral build-out to homes, and then operates it along with additional items such as services and support. The local government gains a revenue center to fund other projects.







LET'S WORK TOGETHER TO  
MAKE THE CITY OF SAN RAFAEL  
THE BEST IT CAN BE!

THANK YOU!

**From:** Sidney N. Baskin [REDACTED]  
**Sent:** Saturday, November 24, 2018 2:45 PM  
**To:** Gary Phillips [REDACTED] John Gamblin  
[REDACTED] Kate Colin [REDACTED] Maribeth Bushey  
[REDACTED] Andrew McCullough  
[REDACTED] Paul Jensen [REDACTED]  
**Subject:** 5G Technology

---

Dear County Members and Mr. Jensen,

While I understand the concern over Fifth Generation (5G) wireless services, based on the information opposing this next generation of wireless technology, I believe the campaign against 5G is pretty much a repeat of the opposition to Smart Meter deployment we experienced several years ago. EMF in general is something we live with daily, including our daily exposure from the Sun and I agree we should all be aware of over exposure to it. Whether 5G or any other source of EMF is a risk to public health should always be a consideration, weighing the benefits against risks. When considering cell phone technology and exposure to EMF, unfortunately, the closest source of exposure to EMF is from the cell phone's transmission we hold to our ear. Cell phone bi-directional transmission exposes us on a daily basis regardless of the frequency our current devices we may be utilizing. We live in a world full of unavoidable EMF exposure and we need to see more conclusive evidence and agreement from the scientific community before condemning future generations of communication. There is no doubt that EMF has an effect on all life on this planet, however the public deserves an honest unbiased evaluation of EMF from all current and future sources of exposure to it. There is much factual information available on EMF exposure and I suggest reading it before opposing or supporting new technological services, 5G being one of them. At this point, I find much of the arguments for and against 5G not validated from reputable sources at this time and we should not take a position opposing or supporting deployment until valuable conclusive data is available. I would encourage the San Rafael City Council to further thoroughly evaluate the proposed migration to the next generation of cell service from both sides of this argument before making their decision on this proposed advancement in wireless communications.

Sincerely,

Sidney Baskin, San Rafael



-----Original Message-----

From: Lisa Moskow [REDACTED]

Sent: Friday, November 23, 2018 12:11 AM

To: Gary Phillips [REDACTED]

John Gamblin

Kate Colin [REDACTED]

Maribeth Bushey [REDACTED]

Andrew McCullough [REDACTED]

Jim Schutz [REDACTED]

Paul Jensen [REDACTED]

Subject: Dec. 3rd meeting

Thank you for paying attention to our request to deny the application of 5G technology in San Rafael.

Many of us have spent quite a bit of time researching technologies that are untested for safety for human health. We would like to affirm our right to decide for ourselves when and if we are ready to take on this kind of risk. State "mandate" or no state "mandate", we feel that we deserve to make these decisions on the city and/or county level. It looks like several Marin cities have already passed no-5G ordinances and adding San Rafael to this group will give us more power to act in the name of our own health concerns.

I do plan to come to the next meeting on Dec. 5th.

Thank you, Sangita Moskow

**From:** Alex Stadtner [REDACTED]  
**Sent:** Tuesday, November 27, 2018 9:16 AM  
**To:** Gary Phillips [REDACTED] John Gamblin  
[REDACTED] Kate Colin [REDACTED] Maribeth Bushey  
[REDACTED] Andrew McCullough  
[REDACTED] Paul Jensen [REDACTED]  
**Subject:** 5G rollout

---

Dear Mayor, Council Members and Mr Jensen,

Thank you for your careful consideration of an updated ordinance regarding small cell antennas ("5G"). While these antennas may be called "small," they are mighty in their ability to rapidly increase the amount of non-ionizing radio frequency radiation (RFR) in our community. In addition to the adverse impacts to aesthetics and property values these devices may bring, there is real concern over the physiological impacts RFR has on the human body. For a compilation of peer-reviewed and published journal articles on adverse health impacts of RFR, I direct you here: <http://www.bioinitiative.org/research-summaries/>

I want internet that is FAST, RELIABLE, SECURE and SAFE! Who doesn't?

Fortunately there is a viable alternative to 5G that wins in every category above. Please explore a public-private-partnership to bring fiberoptic cable to our homes and offices in San Rafael. The backbone of the infrastructure is already present in Marin, and we could really lead the way in terms of internet speed, reliability and security if you grab this opportunity. I believe the big telephone carriers will be extending fiberoptic as they rollout any new antennas and it's a perfect opportunity to piggyback on those efforts.

This is a unique opportunity being somewhat forced upon you by bigger industry forces. But it's an opportunity never-the-less.

Don't be rolled over by the FCC and sacrifice our town's aesthetics, property values and community health. Instead seize this opportunity to make San Rafael a leader in high-speed internet!

Thank you for your consideration,  
Alex

---

Alex Stadtner

President, MS, CIEC, BBEC, LEED, WELL  
[Healthy Building Science](#)  
Industrial Hygiene & Environmental Testing  
Connect With Us! [Blog](#) | [Facebook](#) | [Twitter](#)  
[Certified B Corp](#)  
CA General B Lic: 1046058  
[REDACTED]

Reply Time Warning: I am frequently days behind on email. If it's urgent please call the office.

**From:** Arthur D. Saftlas [REDACTED]

**Sent:** Tuesday, November 27, 2018 8:56 AM

**To:** Gary Phillips [REDACTED] John Gamblin

[REDACTED] Kate Colin [REDACTED] Maribeth Bushey

[REDACTED] Andrew McCullough

[REDACTED] Paul Jensen [REDACTED]

**Subject:** We have to say NO to the FCC.

---

"Dear Council Members and Mr. Jensen,

We have to say NO to the FCC.

We are very concerned about serious adverse health and environmental impacts caused by the microwave radiation emitted from "small cell" antennas. Please prevent the installation of these dangerous antennas in the City of San Rafael, especially in residential neighborhoods.

Sincerely,  
Arthur Saftlas



**VERIZON AND ATT 5G NEW CELL TOWERS ARE PLANNED 15-50 FEET FROM HOMES!  
EMERGENCY ACTION NEEDED!**

**There will be one of these in front of every home, 200 feet apart, coming to your neighborhood. The refrigerator size thing next to the woman is part of this "small cell tower". Wake yourself up now and get involved to stop this scourge. Contact your County Supervisors and City Council to loudly campaign against this.**

The internet is full of information about the dangers of this 5G rollout. 4G is causing cancers, 5G is 100X's more powerful. Do your homework, but be aware the FCC is staffed with Big Tech, you cannot trust anything they say. They have passed laws that say Health and Safety cannot be considered about the installation of these towers.  
**THIS ALONE SHOULD TELL YOU ENOUGH!**

From the National Institutes of Health. "The industry and FCC are pushing fast at both the state and federal level to put forth legislation to take away home rule in our local municipalities so the industry can install toxic 5G infrastructure before any more of the NTP study findings can be reported out. The FCC and industry are not concerned with public health."

<https://hibr.nih.gov/workgroups/electromagnetic-fields-emf-and-electromagnetic-radiation-emr>

Gov. Jerry Brown vetoed Senate Bill 649, which would have made it easier to install these microwave radiation antennas. The industry is fast coming up with new laws to fast track these terrible things. In spite of laws our City Councils here in Marin are deciding against some installations, but not all.

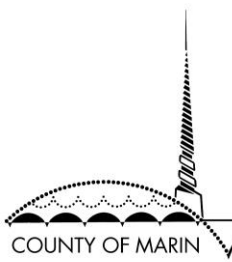
Laws that are unjust must be disregarded; they can be nullified in court. Demand City Councils say NO, and support them saying NO to this attack on everyone's and especially your children's health and safety.

<http://www.cellphonetaskforce.org/5g-litigation/>

<https://emfscientist.org/>

<https://ehtrust.org/science/top-experimental-epidemiological-studies/>

My flyer to awaken you to 5G. I teach awakening to truths. Visit my website, 2b-one.com



# NEWS RELEASE

[www.marincounty.org/news](http://www.marincounty.org/news)

**Contact:**  
**Brian Washington**  
COUNTY COUNSEL

For Immediate Release

October 31, 2018

Marin County Civic Center  
3501 Civic Center Drive  
Suite 275  
San Rafael, CA 94903  
415 473 6117 T  
CRS Dial 711

[County Counsel website](#)

**Brian Case**  
DEPUTY  
COUNTY COUNSEL

Marin County Civic Center  
3501 Civic Center Drive  
Suite 275  
San Rafael, CA 94903  
415 473 6117 T  
CRS Dial 711

[bcase@marincounty.org](mailto:bcase@marincounty.org)  
[County Counsel website](#)

## **County Joins Court Action on 5G Technology**

*Marin now among coalition of public agencies against FCC ruling for deployment*

**San Rafael, CA** – The County of Marin is filing an action in the U.S. Court of Appeals to challenge federal deployment of fifth-generation cellular wireless service, widely known as 5G.

The Marin County Board of Supervisors reported out of a closed-session meeting October 30 that it would file the action against the Federal Communications Commission (FCC) and its September 26 order to accelerate the buildout and installation of 5G technology. The Town of Fairfax is the only other Marin County municipality to file such an action.

County Counsel reported that the County will join a coalition of public entities represented by Spiegel & McDiarmid, LLP, that will appeal the FCC order. In formal comments filed with the FCC last July, Spiegel & McDiarmid argued that the wireless industry wants to transform the FCC into “a regulator of state and local governments rather than a regulator of communications service providers.” Now that the FCC has adopted the industry-favorable rules, Spiegel & McDiarmid’s coalition will take those arguments to court.

The County is taking the legal step to protest the federal government’s seizing of local control on the deployment of 5G and how implementation costs can be recovered. While local governments have always been preempted from regulating based on radiofrequency (RF) radiation concerns, local governments always have been able to regulate neighborhood aesthetics and other safety matters. The new FCC ruling handcuffs traditional areas of local regulation with new time limits and constraints.

According to the FCC ruling, which is taking effect in January 2019, cellular service providers will have access to local infrastructure at cost rather than at fair-market-value. In addition, the FCC order shortens the “shot clocks” and wireless permitting timelines, forcing local entities to act on applications for deployments on existing structures within 60 days. On new structures, municipalities would have 90 days to approve or deny applications.

-more-

5G technology requires the installation of a greater number of smaller antennas because they have shorter range. The FCC ruling limits local governments' ability to say "no" to the cellular industry's demands based on aesthetic concerns about the antennas.

In recent Board meetings, several residents have voiced opposition to the FCC ruling. Some cited health concerns of RF radiation, but data on health impacts of 5G is inconclusive at this stage. In addition to cell phone services, RF is commonly used in radio and television broadcasting, microwave point-to-point links, satellite communications, and in noncommunication devices such as microwave ovens and industrial heaters.

Cell service providers are planning to conduct test markets in major cities later this year, and the first 5G cell phones are expected to be released next year. 5G technology allows a user to download an entire movie on a phone or mobile device within seconds. Each generation of cellular technology is defined partly by its transformative increase in speed but also its incompatibility with the previous generation.

Once Marin's filing is official, a U.S. Circuit Court of Appeals will generate a briefing schedule for the multiple agencies involved and the matter will be fully briefed. County Counsel expects oral arguments and a final ruling sometime in 2019.

In addition to the County and the Town of Fairfax, the cities of San Jose and Piedmont have filed similar actions against the FCC. Nationally, more than 20 municipalities have filed, including Los Angeles and Seattle.

###

**From:** ArleneF@Yahoo.com [REDACTED]

**Sent:** Tuesday, November 27, 2018 9:43 AM

**To:** Gary Phillips [REDACTED] John Gamblin

[REDACTED] Kate Colin [REDACTED] Maribeth Bushey

[REDACTED] Andrew McCullough

[REDACTED] Paul Jensen [REDACTED] **Subject:**

5G

Dear Council Members and Mr. Jensen,

I am very concerned about serious adverse health and environmental impacts caused by the microwave radiation emitted from "small cell" antennas. Please prevent the installation of these dangerous antennas in the City of San Rafael, especially in residential neighborhoods. Also, please encourage mayors and council members of other Marin cities to do the same.

Sincerely,  
Arlene F.



**From:** sonya sakaske [REDACTED]

**Sent:** Tuesday, November 27, 2018 10:18 AM

**To:** Gary Phillips [REDACTED] John Gamblin

[REDACTED] Kate Colin [REDACTED] Maribeth Bushey

[REDACTED] Andrew McCullough

[REDACTED] Paul Jensen [REDACTED]

**Subject:** real estate and small cell antennae

Hi Council Members,

I am currently work in San Rafael and am house shopping in the Ross Valley and San Rafael. If small cell antennae are installed in your fine city, I will not purchase real estate in San Rafael for health and aesthetic reasons.

Mill Valley took an interesting step in prohibiting these towers in residential areas, I wonder if all Marin cities will consider following their lead?

Thank you,

Sonya Sakaske, Pharmacist

[REDACTED]

--

Sonya

**From:** [Victoria Sievers](#)  
**To:** [Lindsay Lara](#)  
**Cc:** [Kim Hahn](#); [Bob Berg](#); [Alex Stadtner](#); [Victoria Sievers](#)  
**Subject:** For Dec. 3 Council Meeting back-up  
**Date:** Wednesday, November 21, 2018 3:58:44 PM  
**Attachments:** [A 5G Future SCCMA Article Revision with References 6 4 17 PDF.pdf](#)  
[Pall-Letter-to-CalLegis-FINAL-8-7-17.pdf](#)  
[Wireless Silent Spring SCCMA Corrected Final Oct 28, 2018 PDF.pdf](#)  
[Why San Rafael Residents Are Concerned.docx](#)  
[CONTENTS for Dec. 3 .docx](#)

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Hi Lindsay,

Thanks for your kind clarification and able assistance!

I am sending five items, 1 through 5.  
(6 through 11 will be part of Paul Jensens's Staff Report. Kim Hahn will cc you with those.)

The edited video for showing at the Dec. 3 Council meeting should be finished on Friday.  
Kim will also send that link to you.

**CONTENTS** (attached Word doc)

- 1) **Why San Rafael Residents Are Concerned About 5G** (attached Word doc)
- 2) **Dr. Sharon Goldberg, M.D.**, testifying before Michigan legislators:  
<https://www.youtube.com/watch?v=F0NEaPTu9oI>
- 3) **Dr. Martin Pall, PhD: Letter to CA legislators** (attachment)
- 4) **Dr. Cindy Russell, M.D.: 5G Wireless Future: "Will It Give Us A Smart Nation or . . ."**  
(attachment)
- 5) **Dr. Cindy Russell, M.D.: "Wireless Silent Spring"** (attachment)

A very Happy Thanksgiving to you and yours.

Vicki

415 454-0104

## CONTENTS

### **1) Statement: Why San Rafael Residents Are Concerned About 5G**

### **2) Dr. Sharon Goldberg, MD, testimony before Michigan state legislators, 2018.**

Dr. Goldberg is an Integrative Internal Medicine physician and expert in environmental illness, including effects of electric, magnetic and radio-frequency radiation. Her background includes fifteen years as an academic Hospital Medicine physician and medical educator responsible for the training of medical students and resident physicians. She was Assistant Professor at New York City's Mount Sinai Hospital, Albert Einstein College of Medicine and the University of Miami Miller School of Medicine. Watch the video here:

<https://www.youtube.com/watch?v=gdbM7OpJQ0k>

### **3) Dr. Martin Pall, PhD, urgent Letter to California Legislators asking them to oppose SB 649 (later vetoed by Governor Brown), which would have streamlined the installation of close-proximity antennas.**

Martin Pall is a Professor Emeritus of Biochemistry and Basic Medical Sciences at Washington State University. He is a widely published and cited scientist on the biological effects of electromagnetic fields and speaks internationally on the topic. His papers are discussed on over 360,000 websites. Dr. Pall is particularly expert in how wireless radiation impacts the electrical systems in the human body.

### **4) Dr. Cindy Russell, MD, “A 5G Future: Will It Give Us A Smart Nation or Contribute To An Unhealthy One?” Published in the Santa Clara County Medical Association Bulletin, 2017.**

Cindy Russell, M.D. is Executive Director of Physicians for Safe Technology and 23-year Chair of the Santa Clara County Medical Association (SCCMA/MCMS) Environmental Health Committee since 1995, and VP of Community Health for the SCCMA/MCMS since 2010. During that time she has authored many policy resolutions related to reducing environmental toxins at the California Medical Association House of Delegates.

### **5) Dr. Cindy Russell, “Wireless Silent Spring.” Santa Clara County Medical Association Bulletin, 2018.**

Publication examining adverse effects of radio-frequency radiation on wildlife, insects, trees and firefighters.

## WHY SAN RAFAEL RESIDENTS ARE CONCERNED ABOUT 5G

1. The federal government has provided only GUIDELINES for exposure to wireless radiation. There are NO SAFETY STANDARDS in the U.S. Despite pleas from experts, the FCC has not completed its investigation on health effects, nor updated 22-year-old safety limits. The FCC has, however, stated on its website that “there is no proof that cell phone radiation is completely safe.” But FCC guidelines are based on *thermal* effects, despite thousands of studies demonstrating *non-thermal* effects.

2. Countries in Europe and Russia have much lower safety limits of radiation exposure because they recognize that adverse biological effects occur at levels considerably below U.S. guidelines. Russia has safety standards of exposure 100 times lower than ours and Switzerland’s safety standard is 1000 times lower.

3. Experts predict that 5G wireless technology will add to the burden of chronic disease to which 2G-3G-4G radiation has already contributed. 5G uses millimeter waves, a much higher frequency than that used by previous generations. 5G bears a profound list of health effects on all biological systems, including cells, bacteria, animals and humans. Resistivity to antibiotics is of particular concern, as is impact to the skin. The skin is the largest organ of the body, linked to the immune system and the nervous system. It is particularly vulnerable to the frequency of radiation in 5G.

4. Wireless radiation from antennas is also linked to increased cancer risk. The World Health Organization classifies wireless radiation as a “possible human carcinogen,” and that classification is expected to soon move to “probable” or “certain.” Glioblastoma (brain cancer) and acoustic neuroma are just two types of tumors on the rise. The WHO claims that we can expect more cancers in the future. The most recent and compelling evidence on cancer comes from the U.S. government NIH National Toxicology Program, a 10-year \$25 million study that reveals conclusively that cell phone radiation causes cancerous tumors of the heart and brain in rats. The American Cancer Society called the results of this study “a paradigm shift.”

5. The World Health Organization recognizes a syndrome called “electrosensitivity” that affects a growing percentage of the population. As far back as 1971, Russian scientists presented to the WHO a comprehensive series of symptoms, which they called “microwave sickness.” Wireless

radiation can cause headaches, fatigue, insomnia, heart arrhythmias, disturbed sleep, concentration problems, memory impairment, breathing difficulties, dizziness and many more symptoms. As with other types of radiation, the dose is cumulative, and 5G will further increase that dose. EHS people have suffered loss of finance, home, work, and inalienable rights.

6. Pregnant mothers and children are especially at risk from wireless radiation. Children's brain tissues are more absorbent, their skulls are thinner and their relative sizes are smaller than those of adults. Radiation penetrates more deeply into children's brains. If 5G were deployed in neighborhoods near homes, schools, and playing fields, a particularly vulnerable population would be exposed to yet another layer of untested radiation.

7. The FCC website claims that ground-level power densities are low when the antennas are attached to poles above us. However, if 5G is deployed in neighborhoods, ground levels of radiation are irrelevant because antennas would be at the level of bedrooms in second and third floor homes where exposure levels would be high and dangerous.

8. 5G antennas are not omni-directional like 2G, 3G or 4G. 5G antennas use phased arrays, which produce steerable, concentrated beams of waves that can join transmissions from nearby antennas. When transmissions are additive, they make dangerous high-level beams and areas of overlap where rays are pulsing at different intervals, causing the mitochondria in every cell of the human body to break down.

9. Residents would not be able to monitor their own exposure because no simple meter or instrument to measure the levels of 5G waves is available. All equipment to measure 5G is military grade, costing about \$100,000. How could electromagnetically sensitive people know which locations would be safe for them? Nobody would be capable of monitoring exposure and no governmental oversight is planned.

10. Environmental effects from 5G are predicted, especially on pollinating insects. In recent years, populations of insect pollinators have been greatly reduced. Insects use radiofrequency waves to communicate amongst themselves, and 5G is expected to bring increased threat to their already compromised survival and to the resultant cascading effect on the food

sources of humans.

Focused concern on the part of both science and citizenry is raising serious questions about the basic safety of our current technologies. Even these technologies were not properly vetted before they were deployed on the public. Adding an untested technology such as 5G into the already multi-layered mix of electro-smog is at best irresponsible to us as adults but arguably criminal when we subject our children to this potential carcinogen.

Dr. Ronald Kostoff, Georgia Institute of Technology researcher, is particularly concerned about the additive effects of 5G in combination with other toxins. “We do not have . . . long-term tests of combinations on human beings . . . We don't have even short-term tests of these combinations. In short, *implementing 5G in the near future without this level of health testing would be analogous to an inaugural commercial flight of an advanced passenger aircraft that had never been flight-tested.*”

Dr. Beatrice Golombe, Professor of Medicine at UC San Diego, has said about 5G deployment, “Many people will suffer greatly and needlessly, as a direct result. Let our focus be on safer, wired and well-shielded technology—not more wireless.”

Representing San Rafael Residents Opposed to 5G-Small Cell Antennas,

Vicki Sievers, EMF Safety Network, Marin Education/Outreach  
Alex Stadtner, Building Biologist  
Kim Hahn, Sun Valley  
Bob Berg, Mont Marin

# Martin Pall, PhD

August 7, 2017

Dear California Legislators,

I am Dr. Martin Pall, Professor Emeritus of Biochemistry and Basic Medical Sciences at Washington State University. I am a published and widely cited scientist on the biological effects of electromagnetic fields and speak internationally on this topic. I am particularly expert in how wireless radiation impacts the electrical systems in our bodies. I have published 7 studies showing there exists exquisite sensitivity to electromagnetic fields (EMFs) in the voltage sensor in each cell, such that the force impacting our cells at the voltage sensor has massive impact on the biology on the cells of our bodies [1-7]. These papers are discussed in over 360,000 web sites which can be easily found by Googling (Martin Pall electromagnetic). I received my PhD at Caltech, one of the top scientific institutions in the world.

EMFs act by activating channels in the membrane that surrounds each of our cells, called voltage-gated calcium channels (VGCCs). The EMFs put forces on the voltage sensor that controls the VGCCs of about 7.2 million times greater than the forces on other charged groups in our cells [4,6,7]. This is why weak EMFs have such large biological effects on the cells of our bodies! EMFs works this way not only on human and diverse animal cells [1-7] but also in plant cells [7] so that this is a universal or near universal mechanism of action.

**Thousands of published studies show biological and health effects from electromagnetic fields. We now know the mechanism that can explain these effects. The mechanism is a function of the electromagnetics of each cell—not solely about heating effects from the radiation (on which present FCC guidelines are based).**

This new understanding [1-7] means we can debunk the claims of the wireless industry that there cannot be a mechanism for effects produced by these weak EMFs. The 20 years plus of industry propaganda claims are false. Rather the thousands of studies showing diverse health impacts of these EMFs can be explained. We now have a mechanism, one that is supported by both the biology and the physics, both of which are pointing in exactly the same direction. I am sending as a separate document a list of 134 reviews, each of which provides from 12 to over a thousand individual citations showing health impacts of low intensity EMFs, EMFs that the telecommunications industry claims cannot have such effects. **These 134 reviews and thousands of primary scientific papers they cite show that the industry propaganda has no scientific support whatsoever.**

The consensus among independent scientists on this is further confirmed by the 2015 (and later) appeal made to the United Nations and member states, stating that the current EMF safety guidelines are inadequate because they do not take into consideration non-thermal effects. This was signed by 225 scientists from 41 countries, each of whom had



published peer reviewed studies on EMF health effects – a total of 2,000 papers published in this area by the signers, a substantial fraction of the total publications in this area.

**According to industry, the forces electromagnetic fields place on electrically-charged groups in the cell are too weak to produce biological effects. However, the unique structural properties of the voltage-gated calcium channel (VGCC) protein can, it turns out, explain why the force on a cell's voltage sensor from low-intensity EMFs are millions of times stronger than are the forces on singly-charged groups elsewhere in the cell.**

It would be a disaster for the health of Californians to be exposed to the antennas envisioned in SB.649. The State of California would be making a grave mistake to proceed with supporting the commercial interests of the wireless industry with this legislation. **Legislators would best pause to understand the gravity of the biological effects, and the ramifications for physical and mental health, as well as consequences from continual damage to human DNA, and learn the facts from scientists who are independent of the wireless industry, not from the industry lobbyists who have a gigantic conflict of interest.**

VGCC activation in cells produced by low intensity EMFs can explain long-reported findings that electromagnetic fields and a wide range of biological changes and health effects. The first 6 of these (see below) were well documented 46 years ago in the U.S. Office of Naval Medical Research report, published in 1971 [8]. The others that follow have been extensively documented subsequently in the peer-reviewed scientific literature:

- 1) Various neurological/neuropsychiatric effects, including changes in brain structure and function, changes in various types of psychological responses and changes in behavior.
- 2) At least eight different endocrine (hormonal) effects.
- 3) Cardiac effects influencing the electrical control of the heart, including changes in ECGs, producing arrhythmias, changes that can be life threatening.
- 4) Chromosome breaks and other changes in chromosome structure.
- 5) Histological changes in the testes.
- 6) Cell death (what is now called apoptosis, a process important in neurodegenerative diseases).
- 7) Lowered male fertility including lowered sperm quality and function and also lowered female fertility (less studied).
- 8) Oxidative stress.
- 9) Changes in calcium fluxes and calcium signaling.
- 10) Cellular DNA damage including single strand breaks and double strand breaks in cellular DNA and also 8-OHdG in cellular DNA.
- 11) Cancer which is likely to involve these DNA changes but also increased rates of tumor promotion-like events.
- 12) Therapeutic effects including stimulation of bone growth.
- 13) Cataract formation (previously thought to be thermal, now known not to be).
- 14) Breakdown of the blood-brain barrier.
- 15) Melatonin depletion and sleep disruption.

They may be low intensity but with regard to the VGCCs, electromagnetic fields can have a tremendously powerful impact on the cells of our bodies. Furthermore, published studies showing that calcium channel blocker drugs block or greatly lower biological effects from electromagnetic fields confirm there is a VGCC activation mechanism that is causing various effects. Higher frequency electromagnetic fields from 5G technologies on the horizon pose even greater biological concern than those to which we are exposed today. We should be moving, instead, to wired technologies at every opportunity, based on what we know in science today, not expanding and supporting the proliferation of wireless.

I want to make several additional points very clear:

1. The Physics and the Biology are both pointing in the same direction. Both show that EMFs act primarily via activating the VGCCs in the cells of our bodies.
2. DNA damage known to be produced by these EMFs occur in human sperm and may also occur in human eggs, leading to large increases in mutation in any children born. It is thought that an increase in mutation frequency of 2.5 to 3-fold will lead to extinction because of accumulation of large numbers of damaging mutations. We may already be over this level, and if so, simply continuing our current exposures will lead to eventual extinction. Further increases in exposures will be more rapidly self-destructive.
3. Pulsed EMFs are, in most cases, more biologically active and therefore more dangerous than are non-pulsed (continuous wave) EMFs. All cordless communication devices communicate via pulsations, because it is the pulsations that carry the information communicated. All the industry claims of safety are based on a theory (only thermal effects) that was known to be wrong back in 1971 [8] – and that was before many thousands of additional studies were published providing massive confirmation that industry claims are false.
4. The industry is trying to move to much higher frequencies because these much higher frequencies allow much higher pulsations and therefore much higher transmission of information. However, these higher pulsation rates make these ultra-high devices vastly more dangerous. This is part of the reasons why it is so important to vote down SB.649.
5. None of our wireless communication devices are ever tested biologically for safety – not cell phone towers, not cell phones, not Wi-Fi, not cordless phones, not smart meters and certainly not 5G phones, or radar units in cars – before they are put out to irradiate an unsuspecting public.
6. The telecommunications industry has corrupted the agencies that are supposed to be regulating them. The best example of this is that the FCC which regulates EMFs in the U.S. is a “captured agency”, captured by the industry it is supposed to regulate, according to an 8 chapter document published by the Edmond J. Safra Center for Ethics at Harvard University [9]. Is it any wonder, therefore, that the industry keeps touting that their devices are within the safety guidelines set by the FCC?

I urge you to do the right thing on behalf of the health of Californians and future generations. Please let me know if I can provide further information. (503) 232-3883.

Sincerely,

Martin Pall, PhD (Caltech, 1968)

Professor Emeritus of Biochemistry and Basic Medical Sciences

Washington State University

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# **A 5G Wireless Future: Will it give us a Smart Nation or Contribute to an Unhealthy One?**

**Dr. Cindy Russell**

**V.P. Community Health, SCCMA/MCMS**

*“It would greatly extend FCC’s current policy of the mandatory irradiation of the public without adequate prior study of the potential health impact and assurance of safety. It would irradiate everyone, including the most vulnerable to harm from radiofrequency radiation: pregnant women, unborn children, young children, teenagers, men of reproductive age, the elderly, the disabled, and the chronically ill.” —Ronald Powell, PhD, Letter to FCC on 5G expansion (7)*

## **BRAVE NEW WORLD OF COMMUNICATION**

The use of mobile wireless technologies continues to increase worldwide. A new faster 5th generation (5G) telecommunication system has recently been approved by the Federal Communications Commission(FCC) with new antennas already being installed and tested in Palo Alto and Mountain View. While it may give us uber automation and instantaneous “immersive entertainment” a lot of questions remain with regards to public health and safety of wireless devices. Will the adoption of this new 5G technology harm directly or indirectly the consumers and businesses it hopes to attract?

5G is the new promised land for wireless technology. It could connect us in our homes, workplaces and city streets to over a trillion objects around the world. (96) The Internet of Things (IoT) is primed to give us self-driving cars, appliances that can order their own laundry soap, automation hubs that pay your bills, not to mention fast movie downloads and virtual reality streaming from anywhere when you are on the go. Companies are already asking local cities and counties to move forward to create “Smart Cities” which have comprehensive digital connectivity by installing a massive wireless sensor network of almost invisible small cell antennae on light posts, utility poles, homes and businesses throughout neighborhoods and towns in order to integrate IoT with IT. They state it will improve services, the economy and quality of life. This communication network will form an expanded electromagnetic microwave blanket above each city and county, permeating the airspace and providing seamless connectivity where people and things will exchange data.

Former Federal Communications Commission (FCC) chair Tom Wheeler called this a “National Priority” and thus ushered in approval for the addition of this new pervasive network of high frequency short wave millimeter broadband for commercial use first planned in urban areas.

### **Developing a “Smart” World?**

Engineers and physicists are busy working out the details of carrier frequencies and the architecture of the new network. Manufacturing industries are already developing commonly used products that feature wireless integration that will connect to the densely clustered antennas. Marketing companies are now pushing ads for “smart” devices for “smart” people in “smart” cities. Even the healthcare industry is anticipating using some of these wearable devices for patients with cardiac conditions or to do remote surgery in other parts of the world. Opening up 5G Spectrum access hopes to drive an explosion of new products. The economic opportunities are obvious and business will be booming in the tech industry.

Concerns continue to rise however about the basic safety of our current use of wireless technologies not to mention adding layers of newer microwave frequencies that have not been tested for short term or long term safety. Important questions have not been addressed while industry and government policy have already moved forward.

- Why is the FCC streamlining permitting of 5G high frequency when they have not completed their investigation on health effects nor updated safety limits for low-intensity radio frequency radiation?
- Is the widespread “deployment” of this pervasive higher frequency small cell distributed antennae system in our cities and on our homes safe for humans and the environment?
- Will it add to the burden of chronic disease that costs our nation over a trillion dollars annually? (105)
- Are we already digitally over connected, outsourcing our grey matter and becoming a dysfunctional addicted nation because of it? (136,137,138)
- How will this affect our privacy, cyber security and the security of medical records?
- Will we as physicians be able to recognize the emerging adverse health effects of new millimeter technology and wearable technology let alone that of current wireless devices?

***“Over the past century, this natural environment has sharply changed with introduction of a vast and growing spectrum of man-made EM fields.” Adey (135)***

### **A Good Read: Federal Communications Commission 5G Letters**

Letters to the FCC in 2016 responding to the 5G roll out with the addition of new high frequencies were mixed. Industry generally applauded the FCC for its efforts and discussed the growing demand for this technology along with a need for flexible regulation to implement it. Some expressed concerns about interference with other satellite systems. Some felt there should be maximum spectrum usage opening up even higher frequencies that are only experimental now in order to help “the underserved”. Others argued about opening this up to licensed versus unlicensed uses. Industry did not mention any potential public or environmental health hazards regarding the use of these new frequencies.

### **Raising a Red Flag to Push the Pause Button on 5G**

Private citizens and Ph.D’s, however did raise a red flag at the FCC, recommending a halt to infrastructure plans and more testing for health and environmental reasons. They questioned the current FCC standards which are outdated and not protective of human health. They asked “How will it affect children, pregnant women and the elderly who are the most vulnerable in our population?” While scientists gave ample evidence that precaution should prevail, I found the most compelling letters were from those who describe their fear as electro-sensitive people in an already dangerously high electromagnetic environment for them.

### **Gimme Shelter: No Escape for Electro-Sensitive Individuals**

Linda K. described her electrosensitivity with increased exposure to wireless transmitters. In 1999, a cell tower was installed in her neighborhood 1000 feet from her home. She began sleeping poorly but did not associate this with the cell tower. In 2008, when she turned on a new wireless computer, she became dizzy, nauseated, and couldn’t think. Symptoms ceased when the Wi-Fi card was removed. When smart meters were installed in her neighborhood in 2012 (but not on her home), she experienced severe insomnia. A month later she put together that the cell tower had been the cause of her earlier poor sleep. About two years later she noted an intense, uncomfortable feeling when walking by a nearby house and later identified a Wi-Fi hotspot on a wire going from the utility pole to the house.

She stopped walking near the house. She wrote about her concerns and that the new frequencies may add to her symptoms and inability to leave her house. (54)

In another letter Veronica Z. noted “This is a notice of survival. What many of us deal with currently is trying to survive in an environment that is hostile to us biologically. We have lost all of our rights, our finances, our homes, our ability to earn a living due to this ubiquitous exposure. We are being tortured every second of every day and have been reduced to simply trying to survive the moments we are alive. Others have been unable to do so and have opted to not stay living on this planet of torture...There is no escape for people with severe sensitivities to this deadly radiation.” (55)

### **Ask NASA: Is Electro-Sensitivity Real or Imagined?**

Are these people telling the truth? Is this just psychological? You may wonder, however, more and more people from all ages, professions and walks of life are relating similar symptoms in the presence of wireless devices. Some children reported these symptoms when their school adopted Wi-Fi.

Dr. Scott Eberle, a well respected Petaluma hospice physician, eloquently described his development of electro-sensitivity in the November 2016 issue of the SCCMA Bulletin. He goes to great lengths to continue his profession, interact with his colleagues and maintain a healthy existence. (67)

We are exposed to increasing levels of microwave EMF in our daily lives. More scientific evidence links biologic effects with increased reports of health related effects including electro-sensitivity. In 1971 Russian scientists Gordon and Sadchikova from the Institute of Labor Hygiene and Occupational Diseases described a comprehensive series of symptoms which they called ‘microwave sickness’ and presented this at an international WHO meeting. (109)

In a 1981 NASA report, “Electromagnetic Field Interactions: Observed Effects and Theories” microwave sickness was also described. The symptoms recorded were headaches, eyestrain, fatigue, dizziness, disturbed sleep at night, sleepiness in daytime, moodiness, irritability, unsociability, hypochondriac reactions, feelings of fear, nervous tension, mental depression, memory impairment, pulling sensation in the scalp and brow, loss of hair, pain in muscles and heart region, breathing difficulties, increased perspiration of extremities. (63)

### **The Science of Electro-Sensitivity**



Belpomme, in 2015, completed the most comprehensive study of electro-sensitivity, investigating 1216 people: 71.6% with electrosensitivity, 7.2% with chemical sensitivity, and 21.2% with both. They found an elevation in several reliable disease biomarkers—each occurring within a range of 23% to 40% of all cases—which prompted their conclusion that these sensitivities can be objectively characterized and diagnosed and “appear to involve inflammation-related hyper-histaminemia, oxidative stress, autoimmune response, capsulothalamic hypoperfusion and pathologic leakage of the blood-brain barrier, and a deficit in melatonin metabolic availability” (68)

### **The Science of EMF Biological Harm**

The scientific literature abounds with evidence of non-thermal cellular damage from non-ionizing wireless radiation for several decades. There are likely several mechanisms both direct and indirect. Oxidative damage is one that has been well studied. Effects have been demonstrated on cell membranes causing a shift in the voltage gated calcium channels. Sperm studies have consistently found genotoxic, morphologic and motility abnormalities in the presence of cell phone radiation. DNA damage, blood brain barrier effects, melatonin reduction, nerve cell damage, mitochondrial disruption and memory disturbances have been revealed. The BioInitiative Report (139) has chronicled these effects and a growing wave of PEER reviewed studies is building on that base daily. In 2011, the International Agency for Research on Cancer classified radiofrequency as 2B carcinogen and “possibly carcinogenic to humans”, the same category as DDT, lead and other pesticides

### **The Latest Science: National Toxicology Program Study on Cell Phones and Cancer**

The most recent and compelling evidence has come from the 2016 National Institutes of Health, National Toxicology Program. Called the NTP Toxicology and Carcinogenicity Cell Phone Radiation Study, the 10 year \$25 million research revealed conclusively that there was a harmful effect from cell phone microwave radiation. (124,125) The frequencies are similar to other wireless devices we commonly use. The studies were robust, collaborative, well controlled and with double the number of rats required to reveal a significant effect, if present. The preliminary results of the study showed that RFR caused a statistically significant increase in two types of brain tumors, gliomas and schwannomas. These were the same two types of tumors shown to increase in human epidemiological studies on long term use of cell phones. Dr. Lennart Hardell and others have demonstrated a consistent pattern of increased incidence of ipsilateral (same side) acoustic

neuromas (vestibular schwannomas) and gliomas with each 100 hours of cell phone use. (112-118) Another telling finding was that the control rats had much lower than expected cancer rates. It is believed due to the fact the control rats were in a controlled faraday cage and not exposed to normal ambient EMF that could contribute to cancer.

Ron Melnik, PhD, Senior Toxicologist and Director of Special Programs in the Environmental Toxicology Program at the National Institute of Environmental Health Sciences (NIEHS) and designer of the study states, "The NTP tested the hypothesis that cell phone radiation could not cause health effects and that hypothesis has now been disproved. The experiment has been done and, after extensive reviews, the consensus is that there was a carcinogenic effect." (124,125,126,127)

## **Health Effects of Millimeter 5G Wavelengths**

The term "millimeter waves" (MMW) refers to extremely high-frequency (30-300 GHz) electromagnetic radiation. Millimeter Waves (MMW) used in the next-generation of high-speed wireless technologies have shallow penetration thus effect the skin surface, the surface of the eye or on bacteria, plants and small life forms. Surface effects, however, can be quite substantial on an organism as stimulation of skin receptors can affect nerve signaling causing a whole body response with physiological effects on heart rate, heart rhythm, and the immune system.

In a 1998 review article, Pakhomov (123) looked at the bio-effects of millimeter waves. He reviewed dozens of studies and cites research demonstrating profound effects of MMW on all biological systems including cells, bacteria, yeast, animals and humans. Some effects were clearly thermal as millimeter microwaves are rapidly absorbed by water which is abundant in living organisms. When microwaves are absorbed the energy can cause tissue heating. Many of the millimeter frequency studies however showed effects without heating of tissues and at low intensities. Research was variable and showed both regenerative effects and also adverse effects depending on frequency, power and exposure time.

### **Arrythmias**

Chernyakov induced heart rate changes in anesthetized frogs by microwave irradiation of remote skin areas. Complete denervation of the heart did not prevent the reaction. This suggested a reflex mechanism of the MMW action involving certain peripheral receptors.(28)

### **Heart Rate Variability**

Potekhina found certain frequencies from 53-78 GHz band (CW) changed the natural heart rate variability in anesthetized rats. He showed that some frequencies had no effect (61 or 75 GHz) while other frequencies (55 and 73 GHz) caused pronounced arrhythmia. There was no change in skin or whole body temperature. (69)

### **Teratogenic Effects**

One study of MMW teratogenic effects was performed in Drosophila flies by Belyaev. Embryos were exposed to 3 different GHz frequencies for 4-4.5 hours at 0.1 mW/cm<sup>2</sup>. He found that irradiation at 46.35 GHz, but not at 46.42 or 46.50 GHz, caused marked effects including an increase in morphological abnormalities and decreased survival. It was felt the MMW disturbed DNA-protein interactions at that particular frequency.(65)

### **Bacterial Affects and Antibiotic Resistance**

Bulgakova in over 1,000 studies with 14 different antibiotics showed how MMW exposure of S. aureus affects its sensitivity to antibiotics with different mechanisms of action. The MMW increased or decreased antibiotic sensitivity depending on the antibiotic concentration. (134)

Pakhomov warns, “Regardless of the primary mechanism, the possibility of significant bio-effects of a short-term MMW irradiation at intensities at or below current safety standards deserves consideration and further study. The possibility of induction of adverse health effects by a local, low-intensity MMW irradiation is of potential significance for setting health and safety standards and requires special attention.” He called for replication of studies especially long term effects of MMW.

His conclusions

- 1) Individuals or groups in a population, which would usually be regarded as uniform, may react to MMW in rather different or even opposite ways
- 2) There seem to exist unknown and uncontrolled factors that determine the MMW sensitivity of a specimen or a population. Irradiation could increase antibiotic resistivity in one experiment and decrease it in the next one

3) Increased sensitivity and even hypersensitivity of individuals to MMW may be real. Depending on the exposure characteristics, especially wavelength, a low-intensity MMW radiation was perceived by 30 to 80% of healthy examinees.(123)

### **Cataracts**

Prost in 1994 studied millimeter microwave radiation on the eye. He noted that microwaves of different wave-lengths can induce the development of cataracts. (13) His research found that low power millimeter waves produced lens opacity in rats exposed to 10mW/cm<sup>2</sup>, a predisposing indicator of cataracts. (74)

### **Immune System**

Kolomytseva, in 2002, looked at the dynamics of leukocyte number and functional activity of peripheral blood neutrophils under whole-body exposure of healthy mice to low-intensity extremely-high-frequency electromagnetic radiation (EHF EMR, 42.0 GHz, 0.15 mW/cm<sup>2</sup>, 20 min daily). The study showed that the phagocytic activity of peripheral blood neutrophils was suppressed by about 50% in 2-3 h after a single exposure to EHF EMR.(131)

### **Chromatin Effects**

Gapeve in 2003 showed for the first time that low-intensity extremely high-frequency MMH electromagnetic radiation in vivo causes effects on spatial organization of chromatin in cells of lymphoid organs. Chromatin is a complex of DNA and proteins that forms chromosomes within the nucleus of eukaryotic cells. He exposed mice to a single whole-body exposure for 20 min at 42.0 GHz and 0.15 mW/cm<sup>2</sup>. (132)

### **Gene Expression**

Habauzit in 2013 looked at gene expression in keratinocytes with 60GHz exposure at upper limit of current guidelines and concluded “In our experimental design, the high number of modified genes (665) shows that the ICNIRP current limit is probably too permissive to prevent biological response. (73)

### **Gaps in Data for Launching 5G Millimeter Devices**

Commercial production often precedes research on consumer protection and health effects. We have too many toxins that have escaped premarket safety protocols for too long- lead, asbestos, smoking and our modern unregulated nanoparticles to mention just a few. These affect our long term and short term health in ways we do not even know. If we become ill, we do not question or identify the daily or weekly

chemical exposures that could have contributed to that cancer or arthritis or lung disease or Alzheimer's. We have too many toxins to sort it all out.

Research shows that wireless microwave radiation adds yet another dose of toxic exposure to our daily lives. We cannot hear it or smell it or feel it. Yet it affects our biology and our wellbeing with perhaps subtle affects. If we are electro-sensitive then we are more likely to avoid exposure. Trees are even susceptible to EMF harm and they cannot move away. (128) What about birds and bees and us?

### **Close Encounters: Google Glass, Virtual Reality and Wearable Wireless Devices**

If we are concerned about putting a cell phone to our ears for long periods of time after reading about the NTP study then why aren't we concerned about other wearable devices? While very cool to use, Google Glass and Virtual Reality may have dangerous consequences to our eyes, brain function or immune systems with long term use, especially to children. What are the frequencies in these devices? 3G,4G, 5G or a combination of zapping frequencies giving us immersive connection and entertainment but at a potentially steep price.

### **5G Research and Policy**

Safety testing for 5G is the same as other wireless devices. It is based on heat. This is an obsolete standard and not considering current science showing cellular and organism harm from non-thermal effects. There is a large gap in safety data for 5G biological effects that has been demonstrated in older studies including military.

### **New Recommendations to Protect Public Health**

- 1) Do not proceed to roll out 5G technologies pending pre-market studies on health effects.
- 2) Reevaluate safety standards based on long term as well as short term studies on biological effects.
- 3) Rescind a portion of Section 704 of the Telecommunications Act of 1996 which preempts state and local government regulation for the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects so that health and environmental issues can be addressed.
- 4) Rescind portions of The Spectrum Act which was passed in 2012 as part of the Middle Class Tax Relief and Job Creation Act, which strips the ability city officials and local governments to regulate cellular communications equipment, provides no public notification or opportunity for public input and may potentially result in environmental impacts.

5) Create an independent multidisciplinary scientific agency tasked with developing appropriate safety regulations, premarket testing and research needs in a transparent environment with public input.

6) Label pertinent EMF information on devices along with appropriate precautionary warnings.

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# Wireless Silent Spring

Dr. Cindy Russell

VP Community Health SCCMA

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*“Those who dwell among the beauties and mysteries of the earth are never alone or weary of life.” Rachel Carson, Author Silent Spring.*

## **In The War on Insects: Nature Becomes Silent**

Our ill-fated desire to control nature as well as our tendency to ignore our own complicity in its destruction for profit was the focus of a seminal 1962 book, “Silent Spring”. This publication is widely credited with ushering in the modern environmental movement. (1) Rachel Carson, a marine biologist, and author of “Silent Spring”, was first a lover of nature and a poet. Through her astute observations of nature, careful documentation and gifted writing, she was able to bring attention to the devastating and long lasting effects of pesticides which continue to impact all wildlife and species, including humans.

Her book contains story after story showing the annihilation of birds, squirrels, fish, earthworms, and beneficial insects after the introduction of ever more toxic pesticides to fight invasive insects such as the Japanese beetle. Funds were endless from the Department of Agriculture who declared that these pesticides were perfectly safe as planes deposited hundreds of pounds of pellets into yards, schools and farms. Water turned into poison and rivers of death for salmon and other species. Bird populations of robins, pheasants, and meadowlarks plummeted along with rabbits, muskrats and cats. Farm animals who were exposed withered and many died. Dogs even fell ill. The Japanese beetle survived, however, as most insects cleverly and rapidly become resistant to these chemicals, which can persist in the soil and waterways for years. While species targeted biologic methods of

control and integrated pest management tools have been developed, more and more pesticides have been created leaving us an economically profitable but toxic legacy- DDT, Chlordane, Dieldrin, 2-4 D- Malathion, Glyphosate.

There are many similarities between the silent spring created in cities and farms from pesticides and that of wireless technology with the rapid and widespread adoption of cell towers. Let's examine the effects of this technology that biologists have found on wildlife and then compare the histories, mechanisms and impacts between pesticides and wireless radiation.

## **Wireless Radiofrequency Affects Navigation of Birds and Bees**

It is well known that magnetite, a form of iron ore, is found in a wide variety of organisms. It has been shown that this substance is used to sense the earth's low energy magnetic field as a directional reference. (Cadiou and McNaughton 2010). Magnetite acts as an internal compass. For over 50 years, scientists have known that migratory birds use the earth's magnetic field to navigate. As it turns out, a diverse array of animal life also relies upon this geo magnetic field as their GPS for breeding, feeding, migration and survival.

Biologists have unexpectedly discovered that wireless radiofrequency radiation (RFR) disturbs internal magneto-receptors used for orientation. In addition, this non ionizing radiation can have profound impacts on the natural environment by disruption of other complex cellular and biologic processes in mammals, birds, fish, amphibians, insects, trees, plants, seeds and bacteria. Reported adverse effects from radiofrequency radiation that have been identified include abnormal behavior, developmental abnormalities, diminished reproduction and increased mortality. The effects of this radiation may not be immediately apparent with a slow decline in the health of wildlife seen over time with cumulative exposure, adding a new environmental toxin contributing to silent springs in cities, orchards and farms. The more towers, the more additive mix of radiation frequencies saturating the environment, creating an increasingly toxic air space. Non thermal biological effects are not considered in current guidelines. Appropriate safety testing and regulation of this technology is lacking, however, invention, commercialization and deployment of cell towers marches on-1G, 2G, 3G, 4G, 5G.

## **The Skrunda Radio Location Case**

Firstenberg (2017) in his fascinating and well-referenced book, *The Invisible Rainbow: A History of Electricity and Life*, describes both observations and biological controlled experiments performed, mostly in Europe, where a high



power early warning Radio Location Station tower was in place for over 25 years.(12) Studies performed during and after the tower was removed demonstrated that it caused not only human symptoms including documented memory, attention and motor deficits in children but also affected widespread forest health with loss of birds, thinner growth rings on trees, poor seed germination, loss of duckweed, among other effects. (3) When these towers were removed, not only did the health of the local residents improve, the forest recovered.

### **Bird Migration Disrupted More by Weak Magnetic Fields**

Biologists have discovered that birds magnetic compass orientation appears more vulnerable to weak broadband electromagnetic fields. Pakhomov (2017), Schwarze (2016), Wiltschko (2015). A German scientist, Svenja Engles (2014) lead the research project to confirm this effect. He and his German graduate students exposed migratory European robins to the background electromagnetic noise present in unscreened wooden huts at the University of Oldenburg city campus and found the birds were confused and could not orient using their magnetic compass. If grounded or screened with aluminum their orientation reappeared, but disappeared again if broadband radiofrequencies were generated inside the huts. He did not believe the effects at first and repeated the same double-blinded experiment many times in 7 years and with different graduate students to confirm the effect before publishing his results.

***“And it’s not just pigeons— have you seen any sparrows or parrots around, since these towers started springing up?”***

*K. Pazhaniappan, Secretary, New Madras Racing Pigeon Association (43)*

### **When Homing Pigeons Can’t Find Home**

Modern communications systems with a proliferation of cell towers in cities and now in rural areas, create continuous pulsating artificial radiofrequency wave mixtures that can alter local magnetic fields and thus impair bird migration and orientation of pollinators. In a straight line of sight cell towers can transmit 20 miles or more. In 1998, soon after cell towers were installed in Pennsylvania, pigeon races ended in disaster as up to 90% of birds were disoriented and lost their navigational skills. This was reported in a New York Times article Dec 6, 1998, *When Homing Pigeons Don't Go Home Again.* (2)

The problem of lost homing pigeons is becoming commonplace, leaving pigeon racing aficionados very concerned. (6)(13) A 2013 British Pigeon Insider article notes that pigeon keepers in England reported the loss of dozens of pigeons during races, as well as abnormal frantic behavior near cell towers and declining pigeon reproduction as cell towers have been reproducing in cities and farms. Another article in Wired magazine cites one pigeon fancier who lost two-thirds of his pigeons after a tower was installed next to his farm.

### **Fatal Attraction: Collisions with Cell Towers**

The Audubon Society reports that each year up to 50 million birds, representing 230 different species, die in collisions with communication towers at night. (8) This occurs when they hit the tall, antenna-sporting structures or associated guy wires that support the cables. It has been found that at night birds are lured into the deadly metal structures by the steady beam of red lights on the tops of the towers. The lights are required by law for airline safety but the birds see this as a guiding light and shift from using geomagnetic signals and instead head straight for the beam.

An FAA study showed that small migratory birds become confused when they reach the light and either hit the tower or they continue to fly around the tower until exhausted and they fall to the ground. Flashing red lights seem to reduce the number of fatal bird collisions. (11) Longcore (2013) studied the numbers and types of birds killed by cell towers in the US and Canada and found “Neotropical migrants suffer the greatest mortality; 97.4% of birds killed are passerines, mostly warblers (Parulidae, 58.4%), vireos (Vireonidae, 13.4%), thrushes (Turdidae, 7.7%), and sparrows (Emberizidae, 5.8%). Thirteen birds of conservation concern in the United States or Canada suffer annual mortality of 1–9% of their estimated total population.” A 2015 FAA guideline strongly encouraged operators of all tall cell towers to switch to flashing red lights by 2016. In November of 2016 about 750 tall towers (above 350 feet) had been switched, leaving about 15,000 more to go, according to an American Bird Conservancy report. (24)

### **Cell Towers Not Healthy for Birds or Firemen**

Government agencies, however, are becoming more aware. The Department of Interior wrote a letter in 2014 to the National Telecommunications and Information Administration regarding the DOI concerns about the First Responder Network Authority (FirstNet) and their regulations regarding cell towers and the protection of wildlife, especially migratory birds.(15) First Net is a public-private partnership with AT&T and because of its stated duty to public safety it has significant preemptions.(17) The DOI stated, “the proposals lack provisions necessary to

conserve migratory bird resources, including eagles. The proposals also do not reflect current information regarding the effects of communication towers to birds.” First net noted that the DOI “requested that FirstNet’s procedures include a process for ensuring compliance with the Bald and Golden Eagle Protection Act (‘BGEPA’), Migratory Bird Treaty Act (‘MBTA’), and Executive Order (E.O.) 13186, Responsibilities of Federal Agencies to Protect Migratory Birds.” (16)

The DOI is not the only one concerned about First Net towers. Although public safety is important, what happens when the device intended for safety causes an unintended threat to others? Some firemen have experienced a variety of neurologic symptoms consistent with electrosensitivity (headaches, dizziness, brain fog, sleep deprivation, irritability) when cell towers were placed on their fire stations. A pilot study of firemen was completed in 2004 and brain scans confirmed those with symptoms had evidence of adverse brain alterations. Because of this, the International Association of Firefighters has developed a policy to ask for exemptions from cell tower placement on or adjacent to fire stations with new cell tower legislation. (19) It is codified in California’s AB57(2015). (18)

***“The exponential increase of mobile telephony has led to a pronounced increase in electromagnetic fields in the environment that may affect pollinator communities and threaten pollination as a key ecosystem service.” Lazaro 2016***

## **The Decline of Birds, Bees and Wildlife with Increasing Radiofrequency Radiation**

Researchers are now attributing wireless radiation from cellular communications to be a significant contributing cause of bee “colony collapse disorder”, insect disappearance, the decline in house sparrows in London (Balmori 2007) (Everaert 2007), as well as the steady deterioration of the worlds bird population with now more than 40% of bird species under critical threat. Insects are not only important pollinators, they are the base of the food chain for birds, amphibians, reptiles and mammals. A Yale report highlights a 2014 study by Stanford professor Rudolfo Drizo, which revealed that 42 percent of the 3,623 terrestrial invertebrate species on the International Union for Conservation of Nature [IUCN] Red List, are

classified as threatened with extinction. He notes, “human impacts on animal biodiversity are an under-recognized form of global environmental change.” (5)

### **Wireless Radiation and Colony Collapse Disorder**

Bees are a critical pollinator species for agricultural productivity. (20) Of the 100 crops that provide 90% of the world's food supply, 71 are pollinated by bees, according to the UN Environmental Program, #Friday Fact. (21) The report also notes that to produce 1 kilogram of honey, a bee must visit four million flowers and fly a distance equivalent to going around the Earth four times. Bee numbers have plummeted in Europe, the United States and around the world in the last 2 decades. Contributing factors affecting the health and reproduction of bees include pesticides, global climate change, loss of habitat and air pollution with new research pointing towards microwave radiation as an important and yet unrecognized cause for concern. Bees, as well as birds, contain magnetite magneto-receptors in their abdomen.

Electromagnetic microwave radiation has been shown to disrupt bee behavior and may cause worker bees to emit a piping signal to swarm. The bees have also demonstrated aggression after 30 minutes of cell phone exposure. Favre (2017) A cell phone placed next to a bee hive appears to cause a slow destruction of the hive. (Dallo 2015) concludes in his research, “significant decrease in colony strength, honey stores, pollen reserves, number of foragers returning to their hives and egg laying capacity of queens in test colonies. Cell phone radiations disturbed navigational skills of foragers.”

Lazaro (2016) looked at the effect of mobile communication antennas on the abundance and composition of wild pollinators, including wild bees, hoverflies, bee flies, remaining flies, beetles, butterflies, and wasps on two Greek islands with variable distances from cell towers, carefully measuring the radiofrequency radiation. He found negative effects in all groups except butterflies.

Belgian entomologist Marie-Claire Cammaerts (2017) has done a number of studies on RFR and found that insects are particularly sensitive. She writes, “Before the invention of the wireless technology, plenty of active insects fled on crops, flowers, fruits, where they ate, drank, collected nectar, and numerous dead insects were found crushed on cars. Nowadays, all this no longer occurs at such an extent [2]. Bees may be particularly affected by manmade electromagnetism [21,22,23]... When crossing such electromagnetic fields, bees may no longer

remember their way, may no longer fly in the correct direction, and may become unable to go back to their hive.”

These are truly alarming findings and serve as a dire warning on further wireless expansion, especially with regards to sensitive wildlife areas and agricultural rural zones that depend on pollination.

***“When crossing such electromagnetic fields, bees may no longer remember their way, may no longer fly in the correct direction, and may become unable to go back to their hive.”***

*Marie-Claire Cammaerts (2017)*

## **5G Especially Harmful to Insects: The Resonance Effect and Phased Arrays**

Proposed 5G millimeter wavelengths are a similar size to insects and this creates a damaging vibrational effect known as resonance on the organism. Resonance is a well-known phenomenon in physics. A common example is that of a wineglass which shatters when an opera star reaches a high C note, vibrating air molecules matching the glasses natural oscillating frequency. In general, mechanical resonance occurs when the frequency of an oscillation matches the systems or its subcomponents natural frequency and this results in increasingly intensified additive vibration with more energy being absorbed, causing more disturbance of the system. At low power an effect is greatly magnified. Thielens (2018) looked at this effect on 4 different insects exposed to electromagnetic fields from 2 to 120 GHz. He noted, “The insects show a maximum in absorbed radio frequency power at wavelengths that are comparable to their body size.....This could lead to changes in insect behaviour, physiology, and morphology over time due to an increase in body temperatures, from dielectric heating.”

In addition, a newer technology previously used in the military for early warning missile radar systems, PAVE PAWS, is incorporated into these 5G systems and called phased arrays. (29) These powerful "beam steering" arrays scan back and forth from tower to device for easier connection with an individual's movement, to detect the device, similar to the surface-to-air missile systems. (30) They are also used in AM and FM Broadcast stations and planned for automotive sensors and satellites. What effect will this increase in power and density of environmental radiation have on our beneficial insects and pollinators?

## **Review Studies Point to Wildlife Harm**

**Balmori (2015)** states in his latest review “Current evidence indicates that exposure at levels that are found in the environment (in urban areas and near base stations) may particularly alter the receptor organs to orient in the magnetic field of the earth. These results could have important implications for migratory birds and insects, especially in urban areas, but could also apply to birds and insects in natural and protected areas where there are powerful base station emitters of radiofrequencies.

**Cucurachi (2012)** in reviewing 113 peer-reviewed publications revealed, “In about two thirds of the reviewed studies ecological effects of RF-EMF was reported at high as well as at low dosages. The very low dosages are compatible with real field situations, and could be found under environmental conditions.”

**The Ministry of Environment and Forest in India (MOE 2010)** examined all available peer reviewed research on the impacts of wireless radiofrequency (RF) on living organisms at the time, including birds and bees. They found that 593 of the 919 articles showed adverse impacts. In each category of organism, over 60% of the research indicated harm to that biological species.

***“All life pulsates in time to the earth, and our artificial fields cause abnormal reactions in all organisms.” Robert O. Becker, MD, The Body Electric***

## **Trees Damaged by Cell Towers**

Aspen trees reproduce primarily from sprouting from the roots. If a stem dies, another fresh shoot is sent up. “Clones” of tree stands are thus created that can live hundreds to thousands of years. The health of Aspen tree stands is determined by mature trees with shoots and saplings in between. In Colorado, Aspen trees have been on the decline for decades but rapid mortality has been observed in clones since 2004. (25) A preliminary experiment on trembling Aspen trees points to ambient electromagnetic radiation from a variety of sources (cell towers, satellites, RF from electric power generation) causing poor growth and smaller leaves. Seedlings shielded from surrounding low level background RF radiation produced vigorous shoot growth, no necrotic lesions and rich pigmentation in the leaves due

to anthocyanin production, versus unshielded seedlings which had a high percentage of leaf necrotic tissue and a reduction in shoot length. (Haggerty 2009)

Waldmann-Selsam et al (2016) clearly demonstrated, in a robust 4 year study with accurate RF emission testing, cell tower radiation causing the death of nearby trees over time. He notes, "These results are consistent with the fact that damage afflicted on trees by mobile phone towers usually start on one side, extending to the whole tree over time."

### **Are Bee Drones the Answer? "Smart" or Dumb Pollination?**

Wireless technology, however convenient, has consequences. High tech has invaded every corner of our lives and will soon be used in agriculture to pollinate crops as bee colony collapse disorder worsens. In a CNN article "This 'bee' drone is a robotic flower pollinator" The developer notes "It could conceivably be used in large-scale farming, even in hydroponic farming." (22)

As cell towers and wireless systems proliferate, will we continue to ignore their role in harming life sustaining ecosystems? Will we create dead zones in cities where urban or rural farmers will not be able to grow food or have a vegetable garden? Agriculture is already under siege from many other environmental threats. Without bees there will be no pollination or honey. Without birds there will be no seed dispersal.

The tech industry may advise us to use the very technology that is harming ecosystems by using bee drones to pollinate our crops. Walmart has already filed a patent for a robotic bee. (23) These high tech insects would be directed by 4G or 5G radiation to operate via the Internet of Things. Because the size of 5G frequencies matches that of insects, this radiation acts as an insecticide (Yadav 2014). What about ownership of drones, privacy, security and adverse effects on sensitive native bees and flowers, e-waste and energy consumption with the use of these drones? Many questions with no answers but predictable negative consequences. We have been there before with pesticides, asbestos, lead, mercury, with new emerging toxins being regularly introduced. The fallout on public and environmental health continues.

### **Scientists Appeal to the UN for Protective Health and Environmental Standards**



Scientists who study radiofrequency radiation note a serious lack of monitoring and protocols to study the impacts of wireless technology and biologists are calling for precaution in the placement of cell towers with further expansion of wireless broadband. As of August 30, 2018, 244 EMF scientists from 41 nations have signed an Appeal calling upon the United Nations, the WHO and the UNEP to address the public health and environmental concerns raised in an extensive and growing body of scientific evidence on the broad adverse impacts of wireless radiation. (33)

***“Everything is reversible because everything is unfortunately of humankind’s making.”*** *Tris Allinson, Bird Life’s senior global scientist, on the decline of birds*

### **Getting Smarter: Prevention Versus Treatment**

Solving the real problems causing the decline in wildlife seems smarter than always trying to develop a new and potentially more toxic industry to fix it. Indeed, pesticides, habitat loss, over fishing, overhunting, overpopulation, global climate change, environmental toxins, plastics in the ocean have had a devastating impact on species. The World Wildlife Fund and the Zoological Society of London reports that over half of the earth’s wildlife has been lost in the last 40 years. (27)

Prevention is far easier and more economical than treating a problem, especially if the problem becomes irreversible (global climate change). Physicians prescribe medications to treat chronic diseases of our modern culture. They are now recognizing, however, that many of these synthetic medications, while useful, can cause side effects that may be worse than the disease being treated. Current medical care is focused more on cure or treatment than prevention or precaution, causing continuing escalation of health care costs. Would it be better, instead, to encourage lifestyle changes to promote health and wellness with a holistically healthy diet, exercise and policies to reduce environmental toxic exposures?

### **What is a Safe Level of Radiofrequency? Standards Only Look at Heat**

Current guidelines for radiofrequency exposure are set at levels that cause tissue heating, the assumed cause of harm from this radiation. The balance of scientific evidence now indicates that there are significant adverse effects of this wireless radiation at non-thermal levels. (Belpomme 2018) Environmental effects on

wildlife and plants confirms this. The mechanism has been found to be related to calcium channel membrane effects and oxidation.

### **BioInitiative Report**

Sage, Carpenter, Blank and other scientists note in the BioInitiative Report that non-thermal bio-effects are clearly established. The Bioinitiative Report reviewed studies looking at the lowest levels of non-thermal, non-ionizing radiofrequency that did not cause harmful biological effects. Their conclusions, based on peer reviewed research, indicated that there should be a “scientific benchmark of 0.003 uW/cm<sup>2</sup> or three nanowatts per centimeter squared for ‘lowest observed effect level’ for RFR is based on mobile phone base station-level studies.” They also suggest “Applying a ten-fold reduction to compensate for the lack of long-term exposure ...or for children as a sensitive subpopulation,”. This would be a recommended precautionary action exposure level of 0.0003 uW/cm<sup>2</sup>.

(Bioinitiative 2012) Our current U.S. guideline is 200 uW/cm<sup>2</sup> to 1000 uW/cm<sup>2</sup> for RF radiation depending on frequency. This is a substantial difference and indicates a need for reevaluation of FCC safety standards and consideration of published scientific research indicating non-thermal effects. (NTP 2018)

### **Independent Science Ignored**

Professor Emeritus of Biochemistry at Washington State University Dr. MartinPall, has written extensively on this subject. In a recent paper “5G: Great Risk for EU, US and international Health”, he looked at eight distinct types of harm from electromagnetic field exposure. This included DNA damage, carcinogenicity, endocrine, nervous system and reproductive effects. Of 22 robust independent research review papers on non-thermal EMF effects published on or before 2013, 20 were ignored by the latest report of the European Commission’s Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR).

There is an urgent need for government agencies to adopt a realistic biologically based radiofrequency exposure standard to replace the 20 year old thermal (SAR) standard, which is far too permissive and not protective of human or environmental health.

## **Wireless Silent Spring: Parallels Between Pesticides and Wireless Radiation**

In rereading Rachel Carson's book, *Silent Spring*, I was struck by the many similarities between pesticides and wireless radiation.

### **Both are Invisible**

**Pesticides** act as an invisible poison that works on a cellular level and can abruptly or slowly cause disease. You cannot see or taste it on your food or smell it as it drifts through the neighborhoods and enters creeks.

**Wireless** radiation is similarly silent to most. You typically cannot hear, feel or see radiofrequency radiation unless you are electrosensitive. Cellular and biologic damage however is occurring.

### **Both are Universal in our Environment**

**Pesticides** are routinely sprayed in homes, gardens, on trees, in forests to strike insects far and wide. Biomonitoring studies nationwide and in California show pesticides still present in blood, urine and breast milk. (California Biomonitoring) (CDC Biomonitoring NHANES)

**Wireless** radiation is found almost ubiquitously in homes, businesses and schools to connect us to the world and with each other instantaneously. This is supported by well over 300, 000 cell towers in the U.S. not counting private cell towers. The continuous pulsating waves of radiation stray into any nearby living organism, be it human, pet or wildlife.

### **Life Long Exposures: Cradle to Grave**

**Pesticides** and their sometimes more toxic residues are now found in all human cord blood, urine and breast milk, and in children who do not eat organic foods. (Bradman 2003) (Curl 2003) (Lu 2006) (Salama 2017) (CDC Biomonitoring)

**Exposure to wireless** radiation now begins in the fetus with cell towers along with a host of wireless devices in the homes i.e. cell phones, Tablets, Wi-Fi routers, smart meters, and now baby toys, smart cribs and wearable technology.

## **Non Selective Targets to Living Organisms with Indiscriminant Harm**

**Pesticides** are sprayed in large areas to kill a few flying insects but end up harming all species and the balance of nature with ecosystem effects. (EPA Persistent Organic Pollutants)

**Wireless** radiation is sprayed in all directions to find the intended device but also penetrates all living organisms causing cellular damage with ecosystem effects. (Balmori 2010), (Cucurachi 2012) (Sivani S and Saravanamuttu 2013) (NTP 2018)

## **Both Cause a Variety of Adverse Biological Effects**

**Pesticides** can have many toxic biologic impacts and are associated with malignant, neurodegenerative, respiratory, reproductive, developmental, and metabolic diseases in humans. DDT and its metabolite DDE was found to cause blindness in fish and can act as an endocrine disruptor, mutagen and carcinogen. Women exposed to DDT before puberty are five times more likely to develop breast cancer. Glyphosate is linked to cancer. (Creeseey 2015) (Soto 2015) (Mostafalou S and Abdollahi M 2013, 2017)

**Wireless** 2G radiation was found to cause DNA damage and increase the risk of cancer of the heart, brain and adrenal medulla in a recent 10 year, \$25 million dollar National Toxicology Program study (NTP 2018). Non-ionizing radiation from 3G and 4G cell towers have been found to cause nonspecific symptoms of electrosensitivity in some living within 300 meters of a cell tower including insomnia, dizziness, brain fog, fatigue, depression and heart palpitations. Cell phone radiation has been associated with harm to the reproductive system, neurologic system, immune system and hematologic system. (Bioinitiative Report 2014) (Oceana Report)

## **Both are Children of War**

**Pesticides** were first developed as agents of chemical warfare. They happened to kill the research insects and thus became commercialized for that purpose after the war. We can now buy pesticides in the grocery store.

**Radiofrequency** microwave technology was developed in World War II. Known as radar, it has many military uses including for surveillance, missile control, air traffic control, moving target indication, weapons location and vehicle search. (39) At the end of the war, microwave ovens were developed after an engineer discovered a candy bar in his pocket had melted when he was near the magnetron power source. (38) Millimeter technology (95GHz) has been developed for crowd control (Active Denial System). (40) The recent health problems of Cuban, Canadian and Chinese diplomats and their families has been attributed to microwave radiofrequency radiation effects from either RF surveillance or deliberate attacks. (36). Our homes typically have many wireless devices such as cell phones, cordless phones, Wi-Fi, smart meters as well as microwave ovens.

## **Both are Biotoxic: Toxicity Through Oxidation**

**Pesticide** toxicity can take various forms with a direct neurotoxic effect, DNA damage, immune suppression and endocrine disruption through disturbance of many cellular processes. (Mostafalou S and Abdollahi M. 2013, 2017) Newer research on the mechanisms of toxicity of pesticides is focusing on oxidative damage (free radical formation) as the result of a multistep process causing cellular disruption, tissue damage, chronic disease and cell death. (Agrawal 2010) Antioxidants have been shown to lessen the toxic effects of pesticides as well as chemicals. (Akefe 2017)

**Wireless** radiofrequency radiation has also been shown to have a primary mechanism of harm from oxidation. Yamenko (2016) looked at 100 studies of RF radiation both in vivo and in vitro and found 93 showed oxidation as a mechanism of toxicity. Research on antioxidants including curcumin, vitamin C, vitamin E,

melatonin show protection against the effects of non-ionizing radiation with a reduction in oxidative stress.

## **Additive Toxic Mixtures More Harmful**

**Pesticide** exposure does not happen in isolation. Typically, we are exposed to a mix of pesticides in the food we eat. These pesticides circulate in our system for a variable length of time from hours to years and can be stored in our fat or breast milk. The toxic interactions can be long term. A conventional potato has 41 pesticides, 14 of which are classified as carcinogens. (44) EWG tested strawberries and found about 22 pesticides in a conventionally grown berry. Research has shown that mixes of chemicals and pesticides have additive and synergistic toxic effects. For approval, however, these pesticides are studied only one at a time and without their “inactive” ingredients.

The more pesticides we are exposed to the greater the mix of adverse effects on the immune system, reproduction, carcinogenicity, as our protective enzyme and antioxidant mechanisms are overwhelmed. One pesticide can act as a mutagen, the next an endocrine disruptor and the next suppress your immune system to promote cancer. A true toxic triad of effects.

**Wireless** technology has continued to evolve and expand. The 1G analogue system worked well but did not carry much data. While new generations have been introduced to the marketplace to serve our unquenchable appetite for instant wireless information and communication, the old will still be in place-2G, 3G, 4G. With the latest proposed 5G technology and the Internet of Things, industry aims to integrate this with other wireless generations, and even open up any remaining radiofrequency spectrum, creating a blanket of mixed frequency wireless radiation wildlife and humans will be exposed to.

Radiation emissions are not only from cell towers, but also in remotely-controlled stratospheric balloons (Loon Project), far orbiting satellites and proposed low orbiting satellites, greatly increasing ambient levels of electromagnetic radiofrequency radiation (EMR). Like pesticides there has been inadequate research examining the mix of frequencies we are exposed to. The 2018 NTP study, which found clear evidence of carcinogenicity as well as DNA damage and cardiomyopathy, looked only at 2G wireless technology. There are no government plans for testing of 3G, 4G or 5G individually or in combination. Testing for synergistic effects of wireless radiation and toxic chemicals has also not been

attempted. Despite a virtual research vacuum on 5G high frequency radiation, federal and state legislation is being introduced and quickly approved to ensure the rapid deployment of this technology by removing local jurisdiction and limiting fees for cities and counties to use the public right of way. (32)

## **Sensitive Human Populations in Both**

**Pesticides** appear more toxic to some people who do not have the metabolic pathways to transform and excrete them. For organochlorine pesticides such as DDT and Lindane it has been shown that there are genetic variations in human cytochrome P450 metabolic systems which break down these pesticides, causing increased risk of disease. (Docea 2017) Those pesticides workers with paranoxonase genetic polymorphism, with a genetic inability to metabolize pesticides, suffer chronic toxicity exhibited by nausea, dizziness, headaches, fatigue and gait disturbance. Symptoms in those individuals with multiple chemical sensitivity are similar. (Lee 2003) (Rossi 2018)

**Wireless radiofrequency radiation** is observed to cause non-specific symptoms of headaches, dizziness, insomnia, nausea, irritability, depression and heart palpitations in those who are electrosensitive. This was first reported by NASA in military personnel working on radar and was called “microwave illness”. (NASA 1981) Although some studies claim this could be a psychologic condition, researchers have identified a high correlation of symptoms to inflammatory and other biomarkers which can aid the diagnosis. Classic symptoms of electrosensitivity also occur in a high number of those living near cell towers and when a cell tower is removed, symptoms resolve (Santini 2002, Navarro 2003, Shinjyo 2014). Belpomme (2015) conducted a large clinical study and found laboratory biomarkers that connect multiple chemical sensitivity to electrosensitivity. It also has been noted that having these conditions causes predictable isolation and fear which can lead to neuropsychiatric symptoms. (41)

***“Doubt is our product since it is the best means of competing with the “body of fact” that exists in the minds of the general public. It is also the means of establishing a controversy.” (22)***  
*Tobacco executive, from Doubt is Their Product, David Michaels*

## **Industry Deception**



**Pesticides** have been well protected by the industry that created them. An investigation of over 20,000 documents including internal scientific studies, meeting minutes and memos from federal regulatory agencies and manufacturers was led by the Center for Media and Democracy and the Bioscience Research Project resulting in “The Poison Papers” of 2018. (46) Concealment, political manipulation, cover-up and collusion were found, along with suppression of fraudulent independent research and secrecy of the toxic effects of chemicals and pesticides.

**Wireless** telecommunications have been regulated by the Federal Communications Commission (FCC) since the 1996 Telecommunications Act was passed. The Environmental Protection Agency was relieved of their oversight duty of radiofrequency radiation just prior to that. This 1996 Act assumed, even before testing, that there were no health or environmental effects of this radiation. It is specified in the law that health and environmental effects cannot be used as an argument to deny cell tower placement. This has hampered attempts to monitor or identify health effects in the United States. Harvard’s Center for Ethics investigation of the wireless industry, written by Norm Alster, resulted in a publication called “Captured Agency: How the Federal Communications Industry is Dominated by the Industries it Presumably Regulates”. (47) Highlighted is industries exorbitant lobbying influence to the tune of about \$400 million a year according to the Center for Responsive Politics. A revolving door in Washington was also noted with telecom industry executives filling the critical “independent” government positions.

In her excellent book, “Disconnect”, Dr. Devra Davis documents industry manipulation along with discrediting of scientists who have identified and published literature on the adverse health effects of wireless radiation. (48)

### **Our Fate is That of Nature**

We are just beginning to understand the fragile biologic complexities of the Earth’s living creatures as we simultaneously document nature’s decline under the dismissing hand of mankind. Many have warned that our fate will follow that of nature. The expansion of wireless technologies for human convenience will require more cell towers on every street corner. This will threaten natural ecosystems in favor of immersive and invasive technology which is contributing to both negative environmental, physical and mental health effects, especially on our youth. Instead of increasing the number of cell towers, we need to be removing cell towers near schools, homes, businesses and hospitals as well as in wildlife areas.

## **Safer Secure Alternatives: Fiberoptic, Cable and Landlines**

The internet has become a necessity to most people. It can be provided in a safer manner to reduce EMR exposure. Alternatives such as fiberoptic networks and cable exist that are faster, more fire resistant, use less energy and are cheaper in the long run. (49) Traditional copper landlines are reliable in emergencies, cheap, already built and connect everyone without risk. Why remove them? We can have the benefits of faster, dependable and more private communications without compromising public or environmental health.

## **Recommendations by Biologists and Scientists in a 2010 Report by the Ministry of Environment and Forests in India to Protect Wildlife from EMR (paraphrased) (MOE 2010)**

1. Electromagnetic radiation (EMR) should be recognized as a pollutant
2. Create laws to protect urban flora and fauna from EMR
3. Create protected areas with no cell towers
4. Require bold signs on the dangers of radiation to be displayed on all cell tower structures.
5. Perform regular independent auditing of EMR/RF in urban localities-schools, hospitals, residential, recreational and ecologically sensitive areas.
6. Require blinking red lights on cell towers to protect birds at night
7. Create laws to enable removal of existing problematic mobile towers to protect human or environmental health
8. Require ecological assessment and review of sites identified for installing towers before their installation in wildlife, ecologically sensitive or conservational important areas.
9. Strictly control of installation of mobile towers near wildlife protected areas, breeding areas, bee colonies, zoos, and identify with scientific studies appropriate distances from tower structures as part of pre installation review
10. The locations of cell phone towers and other EMF radiating towers along with their frequencies should be made available on public domain. This information would help in monitoring the population of birds and bees in and around the mobile towers and also in and/or around wildlife protected areas.
11. Public consultation to be made mandatory before installation of cell phones towers in any area. The Forest Department should be consulted before installation of cell phone towers. The distance at which these towers should be installed should be studied case by case basis.
12. The government should educate the public about the dangers of EMR and need for precaution, placing signs in wildlife areas and zoos.
13. To prevent overlapping high radiations fields, new towers should not be permitted within a radius of one kilometer of existing towers.
14. If new towers must be built, construct them to be above 80 ft and below 199 ft. tall to avoid the requirement for aviation safety lighting. Construct un-guyed towers with

platforms that will accommodate possible future co-locations and build them at existing 'antenna farms', away from areas of high migratory bird traffic, wetlands and other known bird areas.

## **Abundance of Life and Diversity or a Wireless Silent Spring?**

Natures communication systems evolved using minute electromagnetic signals in tune with the Earth and each other. They are being overwhelmed now with manmade artificial electromagnetic radiation, that in combination with other well established environmental threats spells disaster. Rachel Carson called for humans to “act responsibly, carefully, and as stewards of the living earth.” Science and observation is warning us that a thoughtful approach to all of man-kinds activities is imperative, to favor the protection of biodiversity over profit, innovation or convenience. We need to take a lesson from nature that acts slowly and deliberately to create a healthy balance. Rapid shifts in technology are changing our social structure and separating us from reality, each other and the natural world. There are no limits to “disruptive” 21<sup>st</sup> century wireless technology nor any meaningful safeguards. If we don't slow down and think about the risks as well as the benefits of high tech, will it quietly lead us to a wireless silent spring and then to a silent Earth?

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[https://ethics.harvard.edu/files/center-for-ethics/files/capturedagency\\_alster.pdf](https://ethics.harvard.edu/files/center-for-ethics/files/capturedagency_alster.pdf)

48) **Disconnect: The Truth About Cell Phone Radiation, What The Industry Is Doing To Hide It, And How To Protect Your Family.** Devra Davis, PhD, MPH. 2013.

49) **Re-Inventing Wires: The Future of Landlines and Networks.** National Institute for Science, Law and Public Policy in Washington D.C. 2018.

<http://electromagnetichealth.org/wp-content/uploads/2018/01/ReInventing-Wires-1-25-18.pdf>



**SAN RAFAEL CITY COUNCIL AGENDA REPORT**

Department: City Manager's Office

Prepared by: Andrew Hening,  
Director of Homeless  
Planning & Outreach

City Manager Approval: \_\_\_\_\_

**TOPIC:** FUNDING FOR AFFORDABLE HOUSING IN SAN RAFAEL

**SUBJECT:** DECLARATION OF A SHELTER CRISIS FOR THE PURPOSE OF ACCESSING ONE-TIME STATE FUNDING FOR AFFORDABLE HOUSING IN SAN RAFAEL

**RECOMMENDATION:** Adopt a resolution declaring a shelter crisis pursuant to SB 850 (Chapter 48, Statutes of 2018 and Government Code § 8698.2).

**BACKGROUND:** In the fall of 2018 the State of California announced a one-time, state-wide funding opportunity called the [Homeless Emergency Aid Program](#) (HEAP). HEAP was designed to be a flexible tool for local jurisdictions to finance homeless-related services and capital projects, including but not limited to: mobile hygiene services, shelter, diversion, street outreach, prevention resources, and capital for permanent housing. Each county is eligible for a non-competitive allocation of funding. In Marin County, our allocation is \$4,831,856.30. Five percent of that funding needs to be set aside for homeless youth.

**ANALYSIS:** In awarding the funding, the State of California asked for each community's local Continuum of Care to determine the best use of the funding. In Marin, the local Continuum of Care is called the Homeless Policy Steering Committee (HPSC). The HPSC helps to develop the overall strategy for addressing homelessness in our community, as well as makes funding allocation decisions for state and federal grants. At the end of September, the HPSC convened a working group to determine Marin's local funding priorities for HEAP (Exhibit 1 – Funding Priorities).

**Exhibit 1 – Funding Priorities**

***Project Types***

- Permanent Supportive Housing (PSH)
  - o Must include services appropriate to the population the project proposes to serve
  - o Priority for new construction/acquisition/rehabilitation, as adding to our housing stock is essential
  - o Priority for projects with 24/7 onsite staffing to serve populations that require that level of care
- Housing Navigation/Diversion Pilots

**FOR CITY CLERK ONLY**

**Council Meeting:**

**Disposition:**

***Populations***

- Populations currently underserved by the system of care, e.g. high-needs chronically homeless persons who need 24/7 services, people exiting institutions who were chronically homeless upon entry, youth, domestic violence, etc. Will accept applications from any project that can demonstrate that the proposed population is underserved.
- Particularly encourage set-asides for youth in larger projects

***Additional Priorities***

- Project must be able to demonstrate sustainability and/or continued impact on efforts to end homelessness after this one-time funding has ceased.
- Projects must be Housing First and participate in Coordinated Entry as applicable
- Projects must describe how they will serve clients from all geographic areas of the County, or, if receiving referrals through Coordinated Entry, should commit to working with Coordinated Entry to expand geographic coverage.

Because the HEAP funding would ultimately be distributed through the County of Marin, the County released a Request for Proposals based on the priorities above. The County received seven applications for the HEAP funding, and the HPSC review committee awarded funding to two programs. St. Vincent’s was awarded approximately \$307,965 for a diversion program (i.e. trying to reconnect people with friends and family or other housing opportunities outside of our limited local supportive housing stock), and Homeward Bound was awarded \$4,523,891 for their “Mill Street 2.0” project (Attachment 1 – Homeward Bound’s HEAP Application).

Critically, the State has stipulated that for any capital funding awards, the jurisdiction where the capital project is going to be built must declare a “shelter crisis.” Staff has reviewed the declaration template provided by the County and the State (Attachment 2 – Shelter Crisis Declaration), and in declaring the crisis, the City is not opening itself up to other regulatory requirements or prohibitions. This declaration – and the final application to the State – are all due by the end of the calendar year. If communities do not submit an application with the required declarations, they will not receive HEAP funding and could miss out on future allocations that result from other communities not submitting applications.

**FISCAL IMPACT:** There is no fiscal impact associated with this item.

**RECOMMENDED ACTION:** Adopt a resolution declaring a shelter crisis pursuant to SB 850 (Chapter 48, Statutes of 2018 and Government Code § 8698.2).

**ATTACHMENT:**

1. Homeward Bound’s HEAP Application
2. Resolution

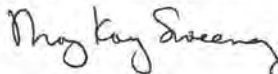


MARIN COUNTY DEPARTMENT OF HEALTH AND HUMAN SERVICES

**HEAP PROGRAM: RFP-HHS-2018-19**

**Date:** November 2, 2018

<b><u>Legal Applicant:</u></b>	
Name:	Homeward Bound of Marin
Address:	1385 North Hamilton Parkway, Novato, CA 94949
Telephone:	415-382-3363
Fax:	415-382-6010
E-mail:	<a href="mailto:info@hbofm.org">info@hbofm.org</a>
Amount Requested:	\$4,500,000
Federal Tax ID No.	68-0011405
Contact Person at Agency/Business:	Paul Fordham
Contact Telephone:	415-382-3363, ext. 211
Contact E-mail:	<a href="mailto:pfordham@hbofm.org">pfordham@hbofm.org</a>

<b><u>Certifications</u></b>	
<p>The applicant certifies to the best of his/her knowledge and belief that the data in this application is true and correct and that filing of the application has been duly authorized by the governing body of the applicant and that applicant will comply with the assurances required of applicant if the application is approved and a contract is awarded. The applicant also attests the costs of the proposed project can be carried by the applicant for at least 90 days at any point during the term of the contract.</p>	
Signature:	 Date: 11-2-18
Name:	Mary Kay Sweeney
Title:	Executive Director

***For County Use Only***

<b>Date Received:</b>	<b>Time Received:</b>
<b>Marin County HHS Staff Signature Acknowledging Receipt of Application:</b>	



## **Application Narrative for Homeless Emergency Aid Program**

### **Development of Mill Street Center Permanent Affordable Housing Units, San Rafael, CA**

Thank you very much for this opportunity to submit this application to County of Marin, Health and Human Services Division of Whole Person Care for funding from the California Homeless Emergency Aid Program (HEAP). Homeward Bound of Marin proposes developing 32 permanent supportive housing units (PSH) as part of the planned upgrade and improvement of the current Mill Street Center emergency shelter in San Rafael. The new Mill Street Center will help unlock the promise and opportunity that exists in a distressed neighborhood while realizing a rare chance to create project-based PSH for an extremely vulnerable homeless population that can benefit immensely from integrated onsite behavioral and social services.

#### **PROGRAM DESIGN**

The overall goals of the new Mill Street Center are to provide pathways out of homelessness for vulnerable men and women; to meet the community's critical need for newly developed, site-based, affordable PSH for the most vulnerable chronically homeless individuals; to replace the current worn and outdated emergency shelter structure with an expanded facility fully integrated with the PSH and 24/7 on-site behavioral and social services; and to uncover the potential of one the most distressed neighborhoods in Marin with a beautiful new building representing the promise of a better life and the hope for a new home.

More specifically, Homeward Bound will rebuild Mill Street Center by expanding and improving the existing emergency shelter, while also adding 32 units of PSH. This will add critically needed affordable housing in a county consistently ranked as the least affordable rental market in the nation (Source: National Low Income Housing Coalition). The focus of this

proposal is on the PSH component of the project only.

The PSH units at Mill Street Center will serve 32 people a year. As a PSH program, residents can stay in their units so long as they remain in good standing, with breach of occupancy agreement terms as the only grounds for termination. There will be no other conditions that would lead to program termination, or that would prohibit program re-entry.

Homeward Bound staff will lead and implement this project. HEAP funds will not be used for staff time. With proven ability in the planning, construction, and management of housing and shelter developments in Marin, Homeward Bound's Executive Director and Deputy Executive Director will manage all aspects of the project, overseeing pre-construction and construction phases, while engaging with stakeholders as work advances.

This project will serve the entirety of the County by reducing the number of people on the streets and meeting Marin's extreme need for affordable PSH for chronically homeless individuals. Marin has no existing SRO sites with PSH that prioritize people facing chronic homelessness. As residents of the new PSH units will be frequent utilizers of multiple emergency interventions, this project will also benefit Marin taxpayers. Permanent housing costs far less than the combined public expenses of emergency-room visits, hospitalizations, inpatients stays, incarceration, and interactions with law enforcement. Moreover, adding PSH to Mill Street Center is a more feasible option for Marin than purchasing new property for this purpose, considering the high cost of real estate in the county and the challenges faced in engendering community acceptance in many area neighborhoods. Mill Street Center faces neither of these challenges because Homeward Bound already owns the property, which eliminates the expense of purchasing a new site, and the agency has excellent neighborhood

relationships as they have been operating emergency shelter with services there for the past 30 years. The City has also expressed strong support for the project, and a nearby precedent exists at 400 Canal St—a 4-story apartment building with 98 rental units above ground-level parking.

Residents of the 32 PSH units will be chronically homeless individuals identified and placed into housing through the County’s Coordinated Entry system, which uses a Housing First model and prioritizes people based on vulnerability. In addition to being underserved, chronically homeless individuals are also growing in number—according to the most recent Marin Homeless Count & Survey, chronic homelessness rose from 281 individuals in 2015, to 329 people in 2017. Last year, the Marin County Civil Grand Jury recommended the County fund up to 400 units of additional housing for this group. Current PSH options for chronically homeless individuals in Marin only exist through scattered-site units without onsite staff. For high-needs clients, this does not provide the best model for remaining stably housed. Given the tight rental market in Marin, landlords are also less willing to lease units for housing chronically homeless individuals when they can quickly rent to people without complex risk factors.

The multifaceted needs of chronically homeless clients require individualized, resource-intensive case management to help them maintain housing while also improving their quality of life. By providing centralized housing with onsite 24/7 staffing, this project will successfully serve the highest-need individuals in our community with the resources they need to get off the streets for good, maintain their housing, and lead thriving lives.

Homeward Bound proposes rebuilding and expanding Mill Street Center by developing a 4-story building at the existing site. An expanded 64-bed shelter will be situated on the second floor with a parking structure at ground level. The third and fourth floors will mirror each other

in design and have 16 PSH units each. These 32 new PSH units are the focus of this proposal.

An architectural proposal for the site has already been developed by Frederic C. Divine Associates, a local firm with which Homeward Bound has effectively partnered in the past for the development of the Next Key Center. The initial concept calls for a 32,000 sq. ft. building (8,000 sq. ft. per floor) with elevator on a property that totals 13,500 sq. ft. The first-floor shelter will include 16 small units of 4 beds each as well as space for services and facility administration. The second and third floors will each have 16 small SRO units, as well as shared kitchen space, bathrooms, and service spaces. The overall scope for the project will include demolition of the existing structure, site preparation, grading, and construction of the new building including parking, shelter, PSH, and required on- and off-site improvements.

Last year, Homeward Bound completed a site investigation of Mill Street Center funded by Tamalpais Pacific. This included soil boring and analysis, as well as boundary and topographic assessments. These feasibility studies found that the site is viable for development. Next steps include a traffic study, and a 12-month process to submit the pre-application and conceptual review, plus secure approvals for setbacks, building height, lot coverage, and parking. The City of San Rafael has provided a matrix to guide this filing and review process with details regarding timelines, requirements, concessions, and allowances. At this preliminary stage, Homeward Bound's goal as an agency is to complete all construction by the end of 2020.

The anticipated total construction costs of this project are \$11.5 million. This extremely competitive cost is made possible by Homeward Bound's existing site control and ownership of the property. Homeward Bound has already been conditionally awarded \$1,567,065 from Partnership HealthPlan for this development, pending receipt of \$1,500,000 in noncompetitive

NPLH funds. Significant additional capital support is being sought through this application to the Homeless Emergency Aid Program, as well as the County, Marin Community Foundation, other foundations, corporate partners, and individual supporters.

The target population for this project is 100% chronically homeless individuals with at least 1 disability, and 50% will also face serious mental illness. They will receive PSH through 32 SRO units and contribute no more than 30% of their income towards monthly occupancy fees.

This project will follow Housing First practices, targeting people with the longest periods of homelessness and greatest barriers, and focusing on moving them into housing as quickly as possible. As with other Homeward Bound PSH programs that follow Housing First, there will be no rules or barriers relating to sobriety, good behavior, or justice system involvement; rather the approach will be to support client progress within the framework of stable housing.

Homeward Bound has demonstrated a strong commitment to serving the most vulnerable and complex individuals and families experiencing episodic or chronic homelessness utilizing evidence-based practices, including Trauma-Informed Care, Harm Reduction, motivational interviewing, critical time intervention, cognitive behavioral therapy, and housing stabilization using Housing First methodology. For example, Homeward Bound's Mental Health Services Program has long used Housing First and Trauma-Informed Care while providing PSH for adults with persistent mental health challenges in the Voyager Carmel Program (26 PSH beds and 10 emergency shelter beds) and the Palm Court PSH Program (26 PSH beds). In addition to the practices mentioned above, this project will also implement assertive community treatment in partnership with Marin Health and Human Services, and Ritter Center. Recently, Homeward Bound has demonstrated this commitment to evidence-based practices by

launching the Family Place Program for families with mental health and substance disabilities experiencing chronic homelessness (41 PSH beds) and the Housing at Last Program for individuals with mental health and substance disabilities experiencing chronic homelessness (26 PSH beds). Both programs employ Housing First. Homeward Bound has recently redoubled commitment to Housing First by joining with other Marin agencies to visit programs in Santa Rosa, Berkeley, and Palo Alto, and learn what is working in the field. Staff and board members have attended workshops by Iain De Jong, a recognized leader in the Housing First movement.

A key benefit of this project is that supportive services will be provided on-site 24/7. Case managers will meet at minimum weekly with each client to provide housing case management and stabilization, counseling, financial coaching, job readiness and retention counseling, health referrals, and to coordinate community-building social activities. Residents will receive services focused on enhancing individual strengths, managing symptoms and medication, and preventing crisis. Services will be as intensive as needed by each resident and provided in collaboration with partners such as Buckelew, Community Mental Health, Legal Aid, Center Point and Ritter. The site is also served by 6 transit lines within .3 miles, and Homeward Bound provides bus vouchers. In addition, there are several stores within .5 miles, including Trader Joe's, Whole Foods, and Rite Aid; 4 parks within 1 mile; and Marin HHS within .75 miles.

This project aligns with the Marin Homeless Policy Steering Committee's local priorities for HEAP by proposing new construction of PSH with 24/7 onsite staffing and resources appropriate to serving chronically homeless individuals whose needs are too acute to be housed in scattered sites throughout the community. This project will also remain sustainable beyond one-time HEAP funding, having a lasting impact on ending homelessness in Marin.

## **ORGANIZATIONAL EXPERIENCE AND CAPACITY**

Founded in 1974, Homeward Bound has earned a reputation for excellence in serving individuals and families experiencing homelessness and envisioning, creating, developing, funding, implementing, operating, and continually evaluating and improving a broad range of innovative residential and service programs. This currently includes 10 PSH programs totaling 305 beds; 3 transitional housing (TH) programs totaling 54 beds; 4 emergency shelter programs totaling 160 beds; a culinary job-training program; and 5 social enterprise revenue centers. Homeward Bound provides a comprehensive range of carefully tailored counseling and supportive service opportunities available in all programs aimed at assisting varied populations, including people experiencing chronic homelessness, families, veterans, and adults with mental health or substance dependence challenges, to become and remain permanently housed and to live independent and satisfying lives. Last year the agency served 1,173 men, women, and children, effectively connecting them with housing and supportive services that ensured 81% of all families and 88% of single adults exited Homeward Bound's programs for stable housing.

Homeward Bound has a long track record of prudence, sound management, and fiscal and program compliance. The organization has managed a wide range of federal and state funding sources as well as private foundation and donor support for the past 20 years for both program operations and capital development, including, but not limited to 7 current HUD Continuum of Care (CoC) PSH grants totaling \$1,665,087 per year; 1 current VA GPD grant averaging \$205,000 annually; and 1 current Emergency Solutions grant averaging \$200,000 a year. Federal funds for capital projects over the past 10 years have included 3 HOME Investment Partnership Program grants ranging from \$300,000 to \$1,550,900; 2 Community



Development Block Grants, and a \$1,000,000 FHLB grant.

Key to Homeward Bound's success in managing government funds has been ongoing oversight by a Board of Directors and Leadership Team that has extensive collective experience managing each funding source and grant. This experience includes timely grant execution, adhering to grant-specific budgeting and program requirements and limitations, effectively documenting and spending program funds, achieving or exceeding grant expectations, and meeting all financial and program reporting requirements.

Financial management is carried out by an experienced Finance Department composed of the Director of Finance, Staff Accountant, and 2 finance assistants. Homeward Bound prepares financial documents using AccuFund, a financial reporting and accounting tool with modules for general ledger, financial reporting, budget reporting, accounts payable, cash receipts, bank reconciliation, reports, and security.

Homeward Bound has lost no funds in the last 3 years due to suspension, reallocation, or performance de-obligation, and has no unresolved funder or audit findings.

## **DATA COLLECTION AND PROGRAM OUTCOMES**

HMIS is used by Homeward Bound to record and track data and outcomes for all programs operated by the agency, and the organization sits on the Marin CoC's HMIS Committee. Homeward Bound's Director of Housing and Operations tracks and evaluates program-level and organizational impact and outcomes. Homeward Bound uses standard data collection forms at intake and exit. Client data is updated every 12 months, or when a significant change occurs, such as an increase in income.

Homeward Bound has proven expertise developing and running PSH, with 10 successful PSH programs offering services similar to the project outlined in this application. Last year 100% of chronically homeless adults in the agency's PSH programs maintained their housing or exited to stable housing, and 100% also increased or maintained income. The success of interventions implemented through this program will be measured by performance targets that include:

- 80% of clients will remain stably housed after 1 year
- 100% of clients will maintain or increase their income after 1 year
- 50% of clients will have decreased emergency room visits after 1 year
- 70% of clients will see decreased hospital admissions after 1 year
- 80% of clients will have decreased hospital inpatient stays after 1 year

If the performance targets of this program are not met, Homeward Bound's Leadership Team and Mill Street Center staff will collectively assess programming to work towards improving outcomes. Support and feedback will also be sought from other Marin CoC providers and partner agencies to collaboratively seek ways to improve performance measures.

**BUDGET**

Sources	Uses
<p><u>Government</u></p> <p>\$4,500,000 – HEAP</p> <p>\$1,500,000 - NPLH Non-competitive</p> <p>\$100,000 – NPLH TA</p> <p>\$141,000 – CDBG</p> <p>\$2,000,000 – Other gov’t sources, e.g., NPLH Competitive, County &amp; City of San Rafael</p> <p><u>Private</u></p> <p>\$1,567,065 - Partnership HealthPlan</p> <p>\$1,500,000 Marin Community Foundation</p> <p>\$191,935 – Other foundations &amp; individuals</p>	<p><u>Soft Costs</u></p> <p>\$1,500,000 - architectural service, fundraising, project management, permitting, and furniture, etc.</p> <p><u>Hard Costs</u></p> <p>\$2.8 million for the ground floor construction</p> <p>\$2.4 million for 2<sup>nd</sup> floor construction</p> <p>\$2.4 million for 3<sup>rd</sup> floor PSH construction</p> <p><b>(proposed use of HEAP funds)</b></p> <p>\$2.4 million for 4<sup>th</sup> floor PSH construction</p> <p><b>(proposed use of HEAP funds)</b></p>
<p>\$11,500,000 Total</p>	<p>\$11,500,000 Total</p>

## BUDGET NARRATIVE

As mentioned above, the anticipated overall project cost will be \$11.5 million with \$7,266,667 as the anticipated total cost for the PSH component of the project. \$1,567,065 has been conditionally awarded by Partnership HealthPlan pending receipt of \$1,500,000 in NPLH funds, and additional capital support is being sought through this application through the Homeless Emergency Aid Program, in addition to the County of Marin, and Marin Community Foundation (MCF), other foundations, corporate partners, and individual supporters.

The \$11.5 million anticipated total project cost includes the following:

- \$1.5 million for soft costs (e.g., architectural service, permitting, and furniture)
- \$2.8 million for ground floor construction (includes underground work and foundation)
- \$2.4 million for the 2<sup>nd</sup> floor construction (emergency shelter)
- \$2.4 million *each* for 3<sup>rd</sup> and 4<sup>th</sup> floor construction – **proposed use of HEAP funds**

The cost-per-unit of the PSH is \$227,083. This extremely competitive cost is made possible not only by Homeward Bound's existing ownership of the property, but also by the cost efficiency generated by integrating the PSH with the emergency shelter as follows:

- \$1,000,000 (67%) of soft costs allocated to PSH
- \$1,866,667 million (67%) of ground floor allocated to PSH
- \$4.4 million (100%) for 3<sup>rd</sup> and 4<sup>th</sup> floors, equals: \$7,266,667 total PSH cost/32 units of PSH = \$227,083 per unit.

## **SUSTAINABILITY**

Homeward Bound's previous construction projects were designed to be operationally self-sustaining by fully paying construction costs up front rather than taking on loans. In this way, client rents, in addition to County contracts will likely be sufficient to cover the basic operational costs of the new Mill Street Center. In addition, use of either project-based vouchers or individual vouchers assigned to chronically homeless adults for some of the units is anticipated as an additional income source. With the new Mill Street Center design, some additional funding for case management of clients living in PSH will be provided by Marin County Behavioral Health and Recovery Services, as required by the NPLH.

The emergency shelter on the first floor beneath the permanent housing units will continue to be funded in part by Marin County HHS. This funding allows on-site overnight staffing, which will make it possible for Homeward Bound to house the higher-need, more vulnerable individuals addressed in this proposal.

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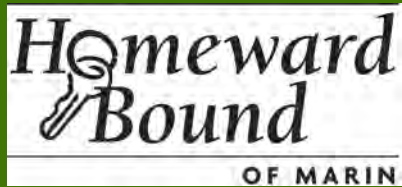
Thank you again for considering this proposal to provide permanent supportive housing for people experiencing chronic homelessness in Marin County. If you have any questions or need additional information, please feel free to contact Homeward Bound Deputy Executive Director

Paul Fordham: 415.382.3363, ext. 211 or [pfordham@hbfofm.org](mailto:pfordham@hbfofm.org)

# ANNUAL REPORT

JULY 2017 to JUNE 2018

# 2018



# WHO WE SERVED



TOTAL:

# 1173

FAMILIES:

# 80

ADULT PROGRAMS:

# 936

FAMILY PROGRAMS:



# 237

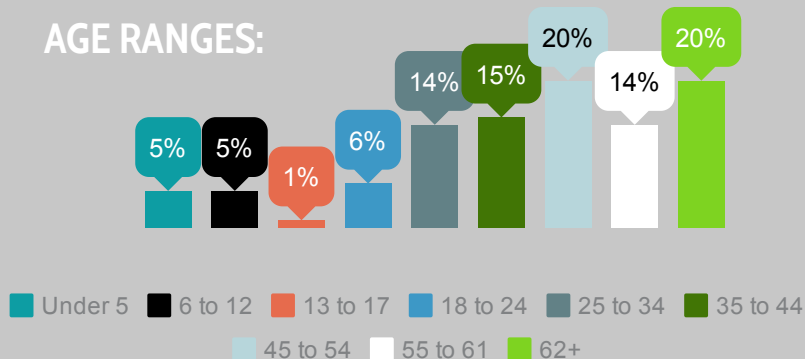
**112 PARENTS**  
**125 CHILDREN**

VETERANS:



# 88

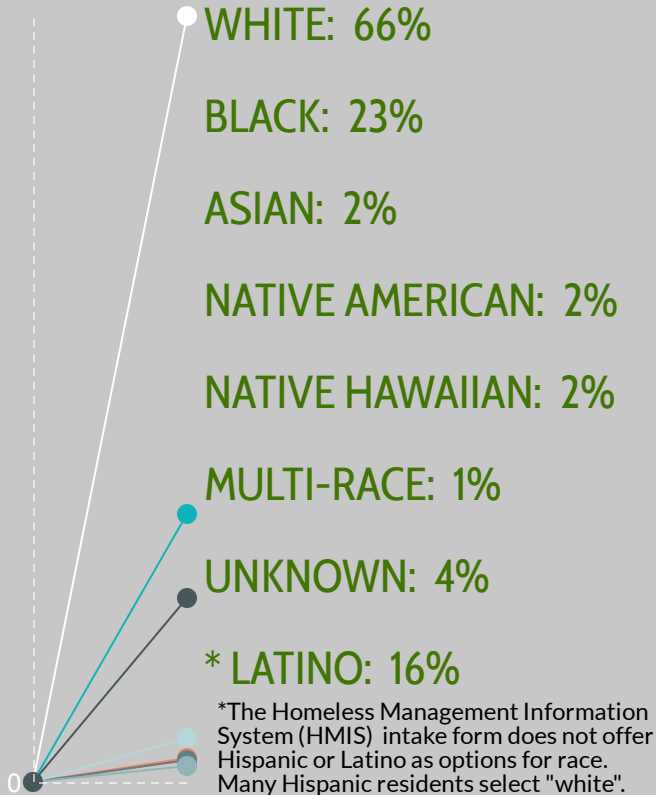
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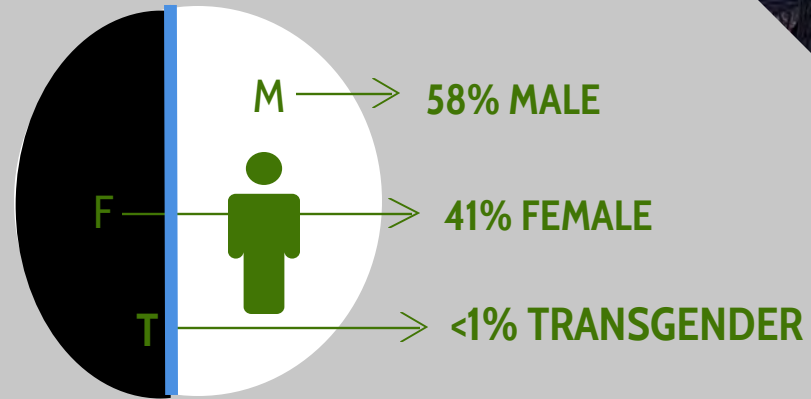


# DEMOGRAPHICS

## RACE AND ETHNICITY



## GENDER:



# HOUSING OUTCOMES

**88%**  
OF ADULTS

Left for a Housing Opportunity



**ADULT PROGRAMS**

**15%**

**23%**

**19%**

**31%**

**12%**

**FAMILY PROGRAMS**

**16%**

**23%**

**21%**

**21%**

**19%**



**81%** OF FAMILIES  
Left for a Housing Opportunity

# FRESH STARTS

The Fresh Starts Culinary Academy is Homeward Bound's job-training program serving both Homeward Bound program participants and low-income students from the community. This 10-week course prepares students for successful jobs in the culinary field. The program is certified by the American Culinary Federation.



**Number of  
Students  
Trained**

**60**



**Graduate  
Average  
Starting Wage**

**\$14.80**



**Percent of  
Students  
Homeless**

**85%**



**Training  
Cost Per  
Student**

**5k**

# HIGHLIGHTS

## Coordinated Entry

Working with County leaders, Homeward Bound jumpstarts the new Coordinated Entry System, starting with a new resident in the Palm Court Program. Coordinated Entry is a process developed to ensure that all people experiencing a housing crisis have fair and equal access and are quickly identified, assessed for, referred, and connected to housing and assistance based on their strengths and needs.

OCT

JULY

## Social Enterprise Success

Homeward Bound now sells Wagster Treats in over 100+ California stores including all Pet Food Express locations.

NOV

## New Housing Program

The Yellow Hallway Program, a partnership with the Dominican Sisters, opens its doors to homeless families who will receive transitional housing for up to two years.



# HIGHLIGHTS



## Housing-Focused Shelter

The New Beginnings Center hires our first Housing Navigator to support a stronger focus on obtaining permanent housing for shelter residents.

## County Fair

In tradition with our love for great food and community, the Fresh Starts team presents a tasty menu at Marin County Fair.

MAR

JUNE

FEB

## Housing for Homeless Seniors

Larkspur Planning Commission approves the use permit for our new group home for seniors (King Street Senior Housing).



HOMeward BOUND OF MARIN

**THANK YOU!**

[www.hbofm.org](http://www.hbofm.org)

# HOMeward BOUND PROGRAM MAP – 2018

## Adult Services

**COMING SOON!**

**King Street Senior Housing**  
Larkspur  
12 beds

PERMANENT SUPPORTIVE HOUSING

**Housing at Last**  
Multiple Locations  
26 beds

PERMANENT SUPPORTIVE HOUSING

**Fourth Street Center**  
San Rafael  
20 rooms (20 beds)

PERMANENT SUPPORTIVE HOUSING

**Next Key Apartments**

Novato  
25 studio units (25 beds)

TRANSITIONAL HOUSING

**Transition to Wellness**

Novato  
3 studio units  
(6 medical respite beds)

EMERGENCY SHELTER

**Fireside Apartments Mill Valley**

Partnership with Eden Housing  
8 senior units (8 beds)

PERMANENT SUPPORTIVE HOUSING

**Warner Creek Senior Housing**

Novato  
Partnership with Eden Housing. Support services provided for 60 residents

PERMANENT SUPPORTIVE HOUSING

**Meadow Park**

Novato  
Partnership with EAH Housing. 6 houses (15 beds)

PERMANENT SUPPORTIVE HOUSING

**New Beginnings Center**

Novato  
80 beds (including 16 beds for veterans)

SHELTER & TRANSITIONAL HOUSING

**Mill Street Center**

San Rafael  
55 beds

EMERGENCY SHELTER

## Family Services

**Oma Village**  
Novato  
14 houses (35 beds)

PERMANENT SUPPORTIVE HOUSING

**Family Place**  
Multiple Locations  
10 houses (41 beds)

PERMANENT SUPPORTIVE HOUSING

**Next Key Apartments**

Novato  
4 studio units (8 beds)

TRANSITIONAL HOUSING

**Family Center**  
San Rafael  
9 rooms (25 beds)

EMERGENCY SHELTER

**Fireside Apartments Mill Valley**  
Partnership with Eden Housing. 10 houses (35 beds)

PERMANENT SUPPORTIVE HOUSING

**San Clemente Family Homes**

Corte Madera  
Partnership with EAH Housing. 4 houses (13 beds)

PERMANENT SUPPORTIVE HOUSING

**Meadow Park**

Novato  
Partnership with EAH Housing. 6 houses (15 beds)

PERMANENT SUPPORTIVE HOUSING

**Yellow Hallway**  
San Rafael  
2 families (5 beds)

TRANSITIONAL HOUSING

## Mental Health Services

**Palm Court**  
Multiple Locations  
26 beds

PERMANENT SUPPORTIVE HOUSING

**Carmel Program**  
San Rafael  
26 rooms (26 beds)

PERMANENT SUPPORTIVE HOUSING

**Voyager Program**  
San Rafael  
5 rooms (10 beds)

EMERGENCY SHELTER

## Job-Training Programs

**Fresh Starts Culinary Academy**

Offers intensive 10-week job-training program. Enrolls up to 80 students annually.

**Apprenticeships**

Offers paid apprenticeships in Janitorial & Building Maintenance and Landscaping & Gardening.

RESOLUTION NO. \_\_\_\_\_

**RESOLUTION OF SAN RAFAEL CITY COUNCIL DECLARING A  
SHELTER CRISIS PURSUANT TO SB 850 (CHAPTER 48,  
STATUTES OF 2018 AND GOVERNMENT CODE § 8698.2).**

**WHEREAS**, California's Governor Edmund G. Brown, Jr. and the members of the California Legislature have recognized the urgent and immediate need for funding at the local level to combat homelessness; and

**WHEREAS**, the Governor and Legislature have provided funding to local governments under the Homeless Emergency Aid Program as part of SB 850 and the 2018-19 Budget Act (Chapter 48, Statutes of 2018); and

**WHEREAS**, the Governor and Legislature require jurisdictions seeking an allocation through the Homeless Emergency Aid Program to declare a Shelter Crisis pursuant to Government Code §8698.2; and

**WHEREAS**, the City of San Rafael recognizes that in addition to the definition of a "shelter crisis" in Government Code Section 8698, a shelter crisis also means a severe lack of permanent housing, preventing people experiencing homelessness from obtaining the housing stability they need to achieve independence and self-sufficiency; and

**WHEREAS**, the City of San Rafael believes adequate shelter is safe, stable, permanent housing; and

**WHEREAS**, the City of San Rafael identified in the 2017 Homeless Point-In-Time Count 233 persons within San Rafael who were homeless and living without shelter; and

**WHEREAS**, the City of San Rafael finds that the number of people experiencing homelessness is significant, and these persons are without the ability to obtain shelter and housing; and

**WHEREAS**, the City of San Rafael finds that the health and safety of unsheltered persons in San Rafael is threatened by a lack of shelter and housing; and

**WHEREAS**, the City of San Rafael supports the other jurisdictions and service providers in Marin County in the effort to decrease homelessness through Coordinated Entry and Housing First principles; and

**WHEREAS**, the City of San Rafael believes this can only be achieved by creating more housing;

**NOW, THEREFORE, BE IT RESOLVED BY** the City Council of the City of San Rafael that a shelter crisis pursuant to Government Code §8698.2, exists in San Rafael, and San Rafael is now authorized to participate in the Homeless Emergency Aid Program.

**I, LINDSAY LARA**, Clerk of the City of San Rafael, hereby certify that the foregoing resolution was



duly and regularly introduced and adopted at a regular meeting of the City Council of said City held on the 3<sup>rd</sup> day of December, 2018, by the following vote, to wit:

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

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LINDSAY LARA, City Clerk