City of Santa Fe, New Mexico

memo

Date: April 24, 2014

To: Mayor Gonzales and Councilors Ives, Lindell and Maestes

Via: Kate Noble, Interim Director KN
Housing and Community Development Department

From: Sean Moody, Special Projects Administrator SM
Economic Development Division

ITEM & ISSUE

CIP High Speed Internet Project update.

BACKGROUND & SUMMARY

The CIP High Speed Internet Project is designed to improve the speed, price and availability of Internet in Santa Fe. The program targets the needs of businesses relying on extraordinarily high connection speeds, including film and television production, health care, education, software development, and financial and data analysis. The project furthers the City's broader economic development goals by:

- Supporting innovative industries and key economic base jobs
- Improving the climate for doing business in Santa Fe
- Improving the business infrastructure in Santa Fe
- Promoting a green and sustainable Santa Fe

The need to address local Internet conditions was confirmed by interviews with area firms and entrepreneurs, by comparison with conditions found in other cities, by consistent support from the business community, and by the expressed will of the City Council itself through a series of initiatives including a $1 million allocation in the most recent CIP bond issue.

The problem is real. Internet service in Santa Fe is typically just half as fast as in other cities. For a typical customer, the difference is immediately noticeable, though often merely a source of annoyance. For a high-demand user, however, the difference is of greater significance. Some areas of

the city are simply unsuitable as business locations because of the absence of very high speed connectivity. And among the project's targeted industries, Internet costs may actually compete with rent, affecting firms' decisions about where, or even whether, to stay, grow or relocate in Santa Fe.

The project is carefully tailored to address a specific condition discovered in Santa Fe. In the context of the deregulated national telecommunications industry in which the vast majority of infrastructure used to deliver Internet to communities is either competitively provided, or regulated, or both, one short, local segment is neither. That segment, a two-mile section of fiber optic cable stretching from the central telephone exchange building on Alameda Street to a prefabricated concrete hut in the rail corridor near Second Street, effectively governs the speed, price and availability of all retail Internet service in Santa Fe, whether the service is delivered to customers by telephone wires, television cable, mobile phones or fixed wireless transceivers. It is a last vestige of the former telephone monopoly.

To fix the problem, the City is installing a second fiber optic cable roughly parallel to the first owned by the telephone company. It will connect to the same two endpoints, and will include a so-called "co-location facility" midway. By this means a competitive market will be created between buyers and sellers of wholesale Internet. Effectively, the project can be thought of as a "Farmers Market for Megabits." In the newly competitive environment, wholesale prices are expected to drop and re-stabilize at sustainable competitive rates. Retail providers will in turn begin to compete for customers by offering better speeds and lower prices. Once fully implemented, Internet speeds and prices in Santa Fe are expected to be on parity with those in Albuquerque. Additionally, the project's co-location facility is designed to be a platform for commercial providers to construct their own fiber optic networks to serve, at first, the most high-demand customers (the project's target businesses), then, in time, all others along the way. In this manner the City's $1 million investment will be leveraged by industry to extend the availability of very high speed Internet to all neighborhoods.

The project is being designed, built and operated by Cyber Mesa Computer Systems, a competitive local telephone and Internet service provider. Under the terms of the contract, Cyber Mesa will also develop transferable business interests including a fiber entrance into the central telephone exchange and long term agreements with providers and carriers for dark fiber leasing, transport capacity, interconnection services and equipment space in the co-location facility. Upon termination of the current contract the City will offer a new agreement for administration and operation of the facilities via a competitive RFP process. The current agreement generates no operational costs or revenues for the City.

The following exhibits detail the proposed fiber route, the layout of the co-location facility and the budget. The project is expected to be fully operational before the end of the 2014 calendar year. A decision-point in the schedule allows the City to confirm initial cost estimates before proceeding to the construction phase. The project is expandable. If customer demand or additional funding is secured, the project can easily incorporate line extensions along the St. Michael's corridor or downtown to City Hall and the Convention Center.

ADDITIONAL POSSIBILITIES:

Beyond the scope of the current CIP project, the City can take further actions to enhance Internet conditions in Santa Fe:

1) City-owned facilities such as streetlights, buildings, land and underutilized antenna towers can be made available to Internet service providers for the installation of antennas and equipment distributing mobile and fixed wireless telecommunications services, subject to the Franchise Ordinance.
2) The City's recurring Internet, Ethernet, telephone and remote data storage services can be procured competitively. Not only would the City benefit directly from lower pricing and better terms, but as the largest single customer of telecommunications services in Santa Fe, the City would be exploiting its buying power to attract providers, stimulate competition and incentivize commercial network expansions, which in turn will increase the choices available to the larger community.
3) The City can seek to acquire long term indefeasible rights to use ("IRUs" in industry parlance) for data transport to the Internet from commercial entities with unused capacity. The City currently has access to the State's capacity through a memorandum of agreement associated with the CIP project. But when the State's own IRU expires in 2030 the City loses that access.
4) The City can provide the financing for line extensions to high demand customers, to new developments and to future redevelopment zones. The process would be similar to the City's water and sewer line expansion programs.

Not recommended are the following:

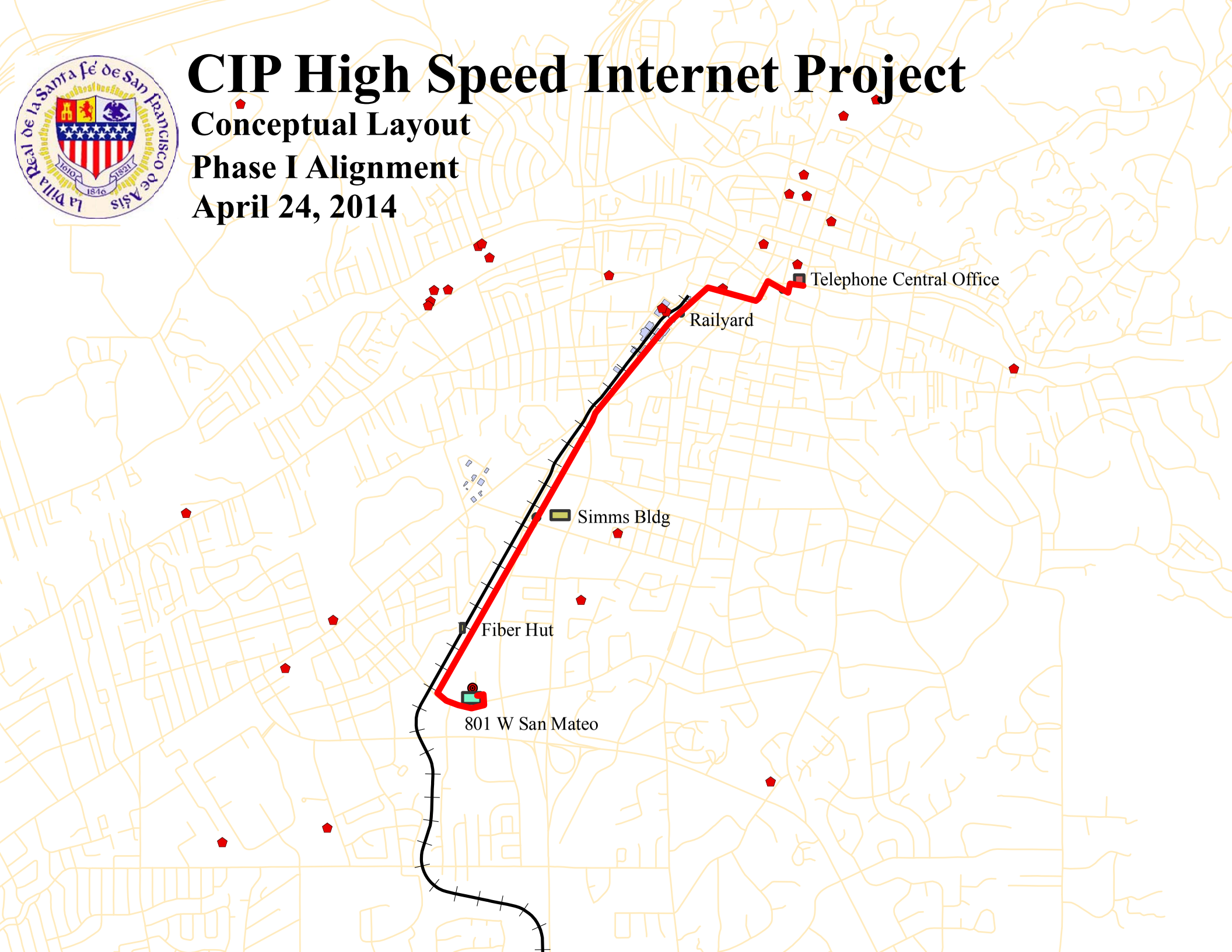
1) Revisions to the Franchise Ordinance beyond those proposed by Legal Staff in response to recent Federal and State Court decisions in Qwest v. City of Santa Fe.
2) Street cut permitting revisions in pursuit of "Dig Once" policy outcomes.
3) A publicly owned telecommunications utility company or universal fiber-to-the-premise project.

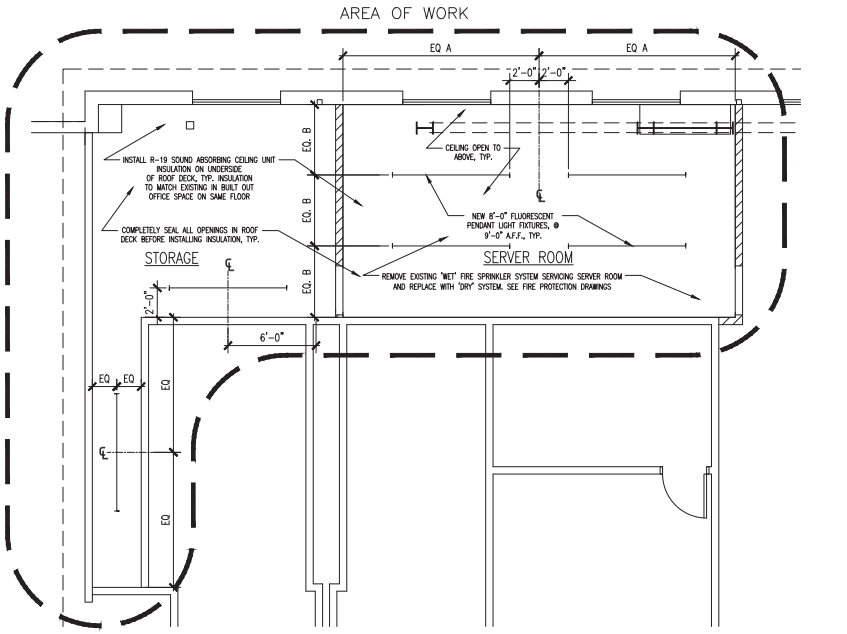
CIP High Speed Internet Project

Conceptual Layout

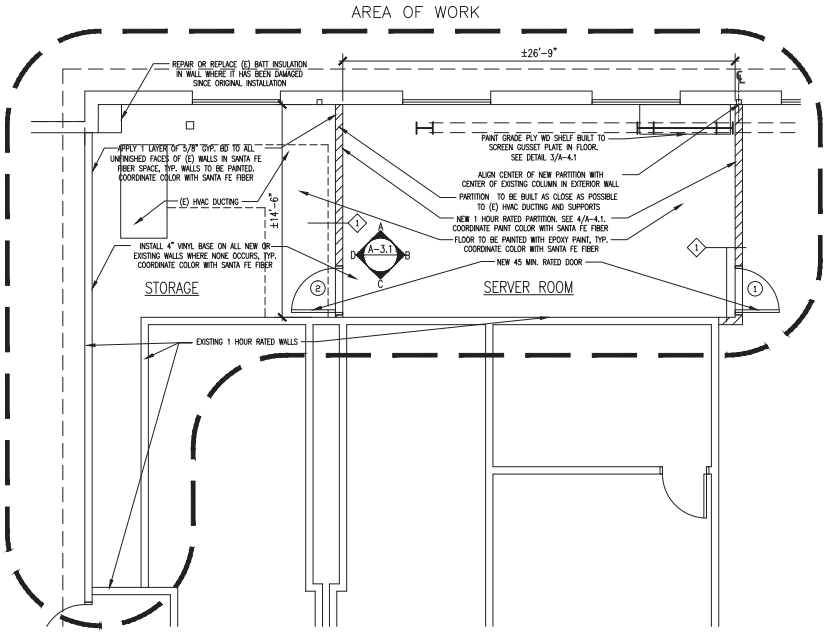
Phase I Alignment

April 24, 2014





2 REFLECTED CEILING PLAN
1/4" = 1'-0"



1 FLOOR PLAN
1/4" = 1'-0"

LEGEND:

NEW 8' WIDE PENDANT FLUORESCENT LIGHT FIXTURE. SEE ELECTRICAL DWGS

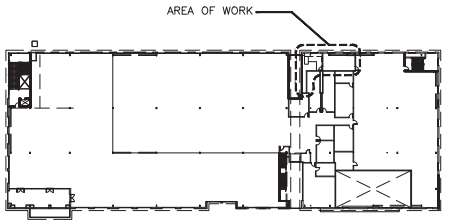
NOTES:
INSTALL 20kw NATURAL GAS GENERATOR TO PROVIDE ELECTRICAL SERVICE IN CASE OF POWER OUTAGE. LOCATION ON ROOF TO BE DETERMINED. SEE ELECTRICAL DRAWINGS.

SEE ELECTRICAL DRAWINGS FOR NEW ELECTRICAL OUTLET TYPES AND LOCATIONS.

LEGEND:

EXISTING WALL

NEW WALL



KEY PLAN
N.T.S.

PLAN A ARCHITECTURE
Plan A Architecture, LLC
P.O.Box 9269 Santa Fe, NM 87504
T: 505.920.1465 F: 505.820.1415
Stephen Samuelson
Greg C Reid

Seal

STATE OF NEW MEXICO
GREG C REID
3438
REGISTERED ARCHITECT

Interior Improvements for
Santa Fe Fiber
500 Market Street, Suite FDC
Santa Fe, NM 87501

Key Plan

Scale	1/4" = 1'-0"
Date	04-18-2014
Job	000

Revisions

FLOOR AND REFLECTED CEILING PLANS

Sheet

A-1.1

CIP High Speed Internet Project

Cost to Complete

April 24, 2014

A ITEM NO.	B DESCRIPTION OF WORK	C SCHEDULED VALUE	D WORK COMPLETED Previously	E WORK COMPLETED This Period	G TOTAL COMPLETED	%	H COST TO COMPLETE
572970	WIP Construction	$882,942	$339	$22,602	$22,942	3%	$860,000
	P.O. 13149367 - Fiber entrance transfer option § 6.B.	$22,100		$22,100	$22,100	100%	$0
	P.O. 13149367 - Construction management services § 3.D.(2)a	$110,000			$0	0%	$110,000
	P.O. 13149367 - Capital Assets Work § 3.D.(4)	$750,000			$0	0%	$750,000
	P.O. 12140234 - Advertising in The New Mexican for RFQ	$339	$339		$339	100%	$0
	P.O. 12140235 - Advertising in ABQ Journal for RFQ	$502		$502	$502	100%	$0
500000	Payroll Expenses	$100,058	$103,656		$103,656	104%	($3,598)
	Actual through 04/23/2014	$100,058	$103,656		$103,656	104%	($3,598)
510300	Professional Services	$12,231	$5,000	$2,500	$7,500	61%	$4,731
	P.O. 13145047 - Engr svcs @ 801 W San Mateo	$7,231		$2,500	$2,500	35%	$4,731
	P.O. 11129338 - Broadband Consulting Worcester Polytech	$5,000	$5,000		$5,000	100%	$0
530600	Software	$2,769		$769	$769		$2,000
	P.O. 13148771 - Primavera Scheduling Software	$2,769		$769	$769		$2,000
572400	Inventory Exempt	$2,000	$642		$642	32%	$1,358
	P.O. 12135651 - Dell 24" monitors	$2,000	$642		$642	32%	$1,358
	Project Totals	$1,000,000	$109,637	$25,871	$135,509	14%	$864,491