MISSION STATEMENT
The City of New Braunfels will add value to our community
by planning for the future, providing quality services, encouraging
Community involvement and being responsive to those we serve.

CALL TO ORDER: March 24, 2016 @ 5:00 P.M.

CALL OF ROLL: City Secretary

1. WORKSHOP

   (A) Presentation and possible direction to City staff on a Business Broadband
       Assessment and Feasibility Study.
       (K. Aday, Assistant City Manager) Page 1

   (B) Discuss and consider approval of a resolution approving a Loan Agreement and
       related agreements related to the commitment of development funding to the
       Reserve at Engel, a multifamily housing development.
       (J. Jewell, Development Coordinator) Page 165

CERTIFICATION

I hereby certify the above Notice of Meeting was posted on the Bulletin Board at the New Braunfels Municipal Building on March 18, 2016, at 3:00 p.m.

Patrick Aten, City Secretary

NOTE: Persons with disabilities who plan to attend this meeting and who may need auxiliary aids or services such as interpreters for persons who are deaf or hearing impaired, readers, or large print, are requested to contact the City Secretary’s Office at 221-4010 at least two (2) work days prior to the meeting so that appropriate arrangements can be made.
SUBJECT: Presentation and possible direction to City staff on a Business Broadband Assessment and Feasibility Study.

BACKGROUND/RATIONALE:
Since early 2015, city staff has been working with the New Braunfels Industrial Development Corporation (4B Board) to undertake a Business Broadband Assessment and Feasibility Study. The 4B Board recommended, and the City Council approved, hiring Magellan Advisors to assist the City in conducting the feasibility study. A steering committee made up of representatives from City staff, the Chamber of Commerce, the 4B Board and recently NBU have guided this work effort, that has culminated in the attached report. Magellan representatives will present the attached feasibility report to the City Council and 4B Board at your joint meeting on March 24, 2016.

The feasibility report offers several options for the City to consider in expanding broadband infrastructure to the business corridors in New Braunfels. At its February 11, 2016 Board meeting the 4B Board agreed with the recommendation that the development of a public-private partnership would be the best avenue to achieve this. In addition, the 4B Board recommends to the City Council continue to contract with Magellan Advisors for Phase II of the project, in the amount of $57,200 (proposal attached) for their professional assistance in development of the public/private partnership. This is a specialized and emerging technology field, and assistance is needed to move forward. Should the City Council agree with this approach, approval of a contract with Magellan Advisors will be placed on your April 11, 2016 agenda for consideration.

FISCAL IMPACT:
N/A
BOARD/COMMISSION RECOMMENDATION:
The New Braunfels Industrial Development Board recommends acceptance of the Broadband Study and to give staff direction to bring back the proposal for Phase II for Council consideration.

STAFF RECOMMENDATION:
No action is necessary. However, staff recommends the City Council provide staff direction to bring back the Phase II proposal for City Council consideration during the April 11, 2016 meeting.

ATTACHMENTS:
Business Broadband Assessment and Feasibility Study (with Appendices)
Broadband Partnership Development
Business Broadband Assessment & Feasibility Study

City of New Braunfels

Prepared by: Magellan Advisors
Released: June 22, 2015
Version: 2.0
Table of Contents

1. Executive Summary ................................................................................................................................................. 4

2. Overview of Broadband Technologies .................................................................................................................. 6
   A. Dial-Up Access ...................................................................................................................................................... 6
   B. Digital Subscriber Line (DSL) ............................................................................................................................ 6
   C. Cable Modem ......................................................................................................................................................... 7
   D. Fiber Optics .......................................................................................................................................................... 7
   E. Wireless ................................................................................................................................................................. 8

3. The Current State of Business Broadband in New Braunfels ............................................................................. 10

4. Future of Business Broadband Demand in New Braunfels? ............................................................................... 15
   A. Overview ............................................................................................................................................................ 15
   B. Applications ....................................................................................................................................................... 16
   C. Economic Development ..................................................................................................................................... 19
   D. Education .......................................................................................................................................................... 22
   E. Healthcare ......................................................................................................................................................... 24
   F. Public Safety ...................................................................................................................................................... 26
   G. Community Support .......................................................................................................................................... 28
   H. Smart City Innovation ....................................................................................................................................... 29
   I. Smart Trash Containers .................................................................................................................................... 30
   J. Street Temperature & Air Quality Sensors ........................................................................................................ 30
   K. Smart Street Lighting Systems ........................................................................................................................ 30
   L. Smart City Innovations through Municipal Fiber Networks ........................................................................ 32

5. Opportunity Assessment - What Impact Can The City Have on Local Broadband? ........................................ 33
   A. Improving Affordability .................................................................................................................................... 33
   B. Increasing Adoption ........................................................................................................................................... 33
   C. Improving Public Efficiency and Effectiveness ................................................................................................. 34
   D. Reducing Taxpayer Spend .................................................................................................................................. 34
   E. Reducing Lead Times for Installation ............................................................................................................... 34
   F. Supporting Reliability and Performance .......................................................................................................... 34

6. Broadband Business Models Overview ............................................................................................................... 36
   A. Policy Participation Only ................................................................................................................................... 36
   B. Infrastructure Provider ....................................................................................................................................... 37
   C. Government Services Provider ........................................................................................................................ 37
   D. Open-access Provider ........................................................................................................................................ 38
   E. Retail Service Provider – Business Only ....................................................................................................... 39
   F. Retail Service Provider – Business & Residential .......................................................................................... 40

7. Retail Business Models ........................................................................................................................................... 42

8. Business Model Recommendations ....................................................................................................................... 44
   A. Broadband-Friendly Public Policy Tools .......................................................................................................... 44
   B. Public-Private Strategies .................................................................................................................................. 46
   C. Broadband Infrastructure .................................................................................................................................. 51

9. Regulatory Analysis .................................................................................................................................................. 63
Table of Figures

Figure 2-1: How Broadband Connects Our Communities ............................................................................................................ 6
Figure 2-2: Capacity Comparisons ..................................................................................................................................................... 8
Figure 4-1: Broadband Application Speed Requirements ........................................................................................................ 16
Figure 4-2: Application Bandwidth Demand Growth ................................................................................................................... 17
Figure 4-3: Proliferation of Broadband Devices ............................................................................................................................ 18
Figure 4-4: Bandwidth Demands for Educational Technologies Per Student ........................................................................ 23
Figure 6-1: Broadband Business Models ........................................................................................................................................ 36
Figure 6-2: Comparison of Business Models ................................................................................................................................ . 41
Figure 8-1: City of New Braunfels, New Braunfels Utility, and New Braunfels ISD Existing Fiber Routes ........................ 53
Figure 8-2: Downtown Core, Zone 1 ................................................................................................................................................ 54
Figure 8-3: Map of North Business Area, Zone 2 .......................................................................................................................... 54
Figure 8-4: Map of South Business Area, Zone 3 .......................................................................................................................... 55
Figure 8-5: Map of Airport Park, Zone 4 .......................................................................................................................................... 55
Figure 8-6: Map of Future Business Park, Zone 6 .......................................................................................................................... 56
Figure 8-7: Map of Overall Deployment .......................................................................................................................................... 57
Figure 8-8: Overlay of Existing Fiber Routes to Deployment Areas .......................................................................................... 57
Figure 8-9: New Braunfels Network Deployment Phasing Plan ................................................................................................ 58
Figure 8-10: New Braunfels Business Corridor Build-Out Costs ............................................................................................... 58
Figure 8-11: Financial Analysis of Deployment (10% Revenue Share, 3% Rate of Return) ................................................. 61
Figure 8-12: Financial Analysis of Deployment (10% Revenue Share, 0% Rate of Return) ................................................. 61
1. Executive Summary

“Broadband access is the great equalizer, leveling the playing field so that every willing and able person, no matter their station in life, has access to the information and tools necessary to achieve the American Dream”. [1] This quote from Michael K. Powell, former chairman of the FCC, stresses that broadband is a vital element of everyday life and is essential to the City of New Braunfels’ current and future economic vitality. Fast, reliable, and affordable broadband access affects nearly every business, and community anchor institution (e.g. hospitals, fire stations, etc.) within the community. Broadband provides the digital infrastructure necessary to connect communities virtually to the rest of the digital world. As more of New Braunfels’ businesses, community anchor institutions, and community organizations utilize the internet for critical services and enhanced lifestyle opportunities, the more reliant they become on fast, high quality, affordable broadband services. This, along with the explosion of more sophisticated online business applications (e.g. Telemedicine, Video Advertising), is driving the need for consistently higher bandwidths.

Broadband is high-speed connectivity to the internet that takes a variety of forms, including DSL over copper, cable, and fixed and mobile wireless platforms. In New Braunfels, most businesses subscribe to either DSL (AT&T) or cable services (Time-Warner). Though these services continue to try and evolve to provide greater speeds and reliability to New Braunfels’ consumers, the demand for bandwidth is quickly outpacing the supply because of inherent limitations in these traditional broadband technologies.

While DSL and cable services are currently acceptable for some of New Braunfels’ business users, it is unlikely that these technologies will meet the long-term broadband demands of the New Braunfels business community. 97% of those surveyed said internet availability was important to their business and that 69% were unsatisfied with the current internet options.

To resolve the increasing demand for more bandwidth, next-generation Fiber-to-the-Premise (FTTP) broadband technologies are being deployed in cities across the country to provide much greater speeds, reliability, and performance. Communities with next-generation broadband are well positioned to thrive and take full advantage of every opportunity the internet and electronic world has to offer.

With the move of communities to next-generation FTTP technologies, the question being asked is what will incumbent providers such as AT&T and Time-Warner do to remain competitive? Time-Warner has publicly stated that they believe that their current cable platform technology can continue to evolve to allow greater speeds, but even with the latest technology upgrade, they cannot match the speeds nor bandwidths of the next-generation FTTP platforms. AT&T has announced that it will replace DSL with FTTP over time, but it is focusing initially on the top 100 cities over the next five to ten years. For other communities, AT&T is looking to install Fiber-to-the-Node (FTTN) technology which installs fiber to centralized distribution points, but still employs DSL and its inherent limitations from the distribution point to the premise.

Outside of current technology limitations, the affordability of broadband services is another key issue in New Braunfels, particularly for local businesses who need more than a basic broadband service. For most businesses, fiber-optic broadband connections are just too expensive. For example, AT&T will offer a direct connect fiber platform for individual business, but the platform is very expensive to install and maintain. Only large-scale businesses can afford this type of platform, leaving the majority of businesses with only the DSL option. Without affordable, next-generation broadband, New Braunfels’ economic development potential will be negatively impacted in several ways. New Braunfels will not be able to effectively attract new businesses, nor retain some of the existing businesses, as these businesses will locate or migrate to more tech savvy communities.

As the pace of the online revolution increases, cities equipped with high-speed, high-quality broadband networks will flourish in the digital world while others struggle to keep up. Realizing the importance to their communities, cities have become actively engaged in how their local communities are served and actively participate in the broadband development process. Vinton Cerf, American internet pioneer and recognized as one of “the fathers of the internet” shares his view on the government’s role in high-speed broadband by stating, “Governments should look at investment in broadband as a national priority on the grounds that having broadband access for virtually everyone creates opportunities for the development of the economy that wouldn’t otherwise be available.”

The goal of this Business Broadband Assessment and Feasibility Study is to give the City of New Braunfels the information it needs to understand the various broadband technologies, the current state of broadband in New Braunfels, what is driving broadband demand in New Braunfels, discussion of viable options, and what we recommend as the best solution based on:

1. Leveraging the city’s core capabilities as a public organization,
2. Current fiber-optic infrastructure,
3. City’s ability to create policy to positively impact broadband development,
4. Economic and financial sustainable
5. Ability to cultivate key public and private partnerships to increase the effectiveness how the community is served, and
6. Perceived risk tolerance of the various options.
2. Overview of Broadband Technologies

Broadband is deployed throughout communities as wired and wireless infrastructure that carries digital signal between end users and the content they want to access. The content comes in many forms and from many locations across the world in the networks that connect the local community to the internet backbone. Websites, television, streaming video, videoconferencing, cloud services, and even telephone service are just a few types of content that are delivered across local broadband networks. Access to this content is made available through the type of infrastructure and kinds of connections available in the local network. Robust local infrastructure results in faster, more reliable access to content. Conversely, local infrastructure that is aging and built on older technologies results in slower, less reliable access to content.

Figure 2-1: How Broadband Connects Our Communities

A. Dial-Up Access

Though not defined as a broadband technology due to speed and bandwidth limitations, dial-up access still exists in many areas of the world. Dial-up internet access is a form of internet access that uses the facilities of the public switched telephone network (PSTN) to establish a connection to an internet service provider (ISP) by dialing a telephone number on a conventional telephone line.

B. Digital Subscriber Line (DSL)

DSL is a wireline transmission technology that transmits data faster over traditional copper telephone lines installed in homes and businesses. DSL-based broadband provides transmission speeds ranging from
several hundred Kbps to millions of bits per second (Mbps). The availability and speed of DSL service may depend on the distance from your home or business to the closest telephone company facility.

The following are types of DSL transmission technologies:

- **Asymmetrical Digital Subscriber Line (ADSL/ADSL2/ADSL2+/VDSL)** – Used primarily by customers who receive a lot of data but do not send much. ADSL typically provides faster speed in the downstream direction than the upstream direction. ADSL allows faster downstream data transmission over the same line used to provide voice service, without disrupting regular telephone calls on that line.

- **Symmetrical Digital Subscriber Line (SDSL)** – Used typically by businesses for services such as video conferencing, which need significant bandwidth both upstream and downstream.

**C. Cable Modem**

Cable modem service enables cable operators to provide broadband using the same coaxial cables that deliver pictures and sound to your TV set. Most cable modems are external devices that have two connections: one to the cable wall outlet, the other to a computer. They provide transmission speeds of 1.5 Mbps or more. Subscribers can access their cable modem service by simply turning on their computers, without dialing-up an ISP. You can still watch cable TV while using it. Transmission speeds vary depending on the type of cable modem, cable network, and traffic load. Speeds are comparable to DSL.

**D. Fiber Optics**

Fiber optic technology converts electrical signals carrying data to light and sends the light through transparent glass fibers about the diameter of a human hair. Fiber transmits data at speeds far exceeding current DSL or cable modem speeds, typically by tens or even hundreds of Mbps.

The actual speed you experience will vary depending on a variety of factors, such as how close to your computer the service provider brings the fiber and how the service provider configures the service, including the amount of bandwidth used. The same fiber providing your broadband can also simultaneously deliver voice (VoIP) and video services, including video-on-demand.

Variations of the technology run the fiber all the way to the customer's home or business, to the curb outside, or to a location (node) somewhere between the provider's facilities and the customer.

- **Fiber to the Node (FTTN)** - Fiber to the Node technologies bring high-capacity fiber-optic cables to local services areas to connect to existing DSL equipment. Rather than bringing fiber-optic cables to every home or business, the fiber is connected to the existing DSL network to increase its capacity. It allows these networks to carry more traffic; however, often times the copper-based “last mile” DSL network, connecting homes and businesses to the local nodes is still a bottleneck and results in subscribers not able to access the true speeds of fiber-optic connections.
- **Fiber to the Premise (FTTP)** - Fiber-To-The-Premise is a technology for providing internet access by running fiber optic cable directly from an Internet Service Provider (ISP) to a user's home or business. It facilitates much faster speeds than dial-up and most coaxial cable internet connections, and generally needs to be serviced less. It's also considered one of the most “future proof” types of internet technology, since there are no foreseeable devices that could use more bandwidth than can be sent via fiber optic cables.

Figure 2-2 compares traditional broadband technologies such as DSL, cable, and wireless to fiber-based next-generation broadband. Whereas traditional broadband technologies have an upper limit of 300Mbps, next-generation broadband that utilizes fiber-optic connections surpasses these limitations and can provide 1Gbps and greater.\(^2\)

![Diagram](image.png)

**Figure 2-2: Capacity Comparisons**

<table>
<thead>
<tr>
<th>Technology</th>
<th>Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dial-Up</td>
<td>56Kbps</td>
</tr>
<tr>
<td>Legacy Technology</td>
<td></td>
</tr>
<tr>
<td>Shared Technology</td>
<td></td>
</tr>
<tr>
<td>ADSL</td>
<td>10Mbps</td>
</tr>
<tr>
<td>First Generation of DSL</td>
<td></td>
</tr>
<tr>
<td>Shared Technology</td>
<td></td>
</tr>
<tr>
<td>ADSL2</td>
<td>24Mbps</td>
</tr>
<tr>
<td>Second Generation DSL</td>
<td></td>
</tr>
<tr>
<td>Shared Technology</td>
<td></td>
</tr>
<tr>
<td>Cable</td>
<td>150Mbps</td>
</tr>
<tr>
<td>DOCSIS 3.0</td>
<td></td>
</tr>
<tr>
<td>Shared Technology</td>
<td></td>
</tr>
<tr>
<td>Next-Generation Fiber-Optic</td>
<td>1Gbps</td>
</tr>
<tr>
<td>PON, Active Ethernet</td>
<td></td>
</tr>
<tr>
<td>Shared and Dedicated Technology</td>
<td></td>
</tr>
</tbody>
</table>

**E. Wireless**

Wireless broadband connects a home or business to the internet using a radio link between the customer's location and the service provider's facility. Wireless broadband can be mobile or fixed. Wireless technologies using longer-range directional equipment provide broadband service in remote or sparsely populated areas where DSL or cable modem service would be costly to provide. Speeds are generally comparable to DSL and cable modem. An external antenna is usually required. Wireless broadband internet access services offered over fixed networks allow consumers to access the internet from a fixed point while stationary, and often require a direct line-of-sight between the wireless transmitter and receiver. These services have been offered using both licensed spectrum and unlicensed devices. For example,\(^2\)

\(^2\) Actual speed and quality of service will depend on the specific service contracted by the end user, whether using a traditional broadband service or a next-generation broadband service.
thousands of small Wireless Internet Services Providers (WISPs) provide such wireless broadband at speeds of around one Mbps using unlicensed devices, often in rural areas not served by cable or wireline broadband networks. Mobile wireless broadband services are also becoming available from mobile telephone service providers and others. These services are generally appropriate for highly mobile customers and require a special PC card with a built in antenna that plugs into a user’s laptop computer. Generally, they provide lower speeds, in the range of several hundred Kbps.
3. The Current State of Business Broadband in New Braunfels

Through outreach meetings with the City of New Braunfels leadership, The Greater New Braunfels Chamber of Commerce, Comal Independent School District, New Braunfels Independent School District, New Braunfels Utilities, and approximately 30 other organizations, various information was gathered detailing the current state of business broadband in New Braunfels.

In addition to the outreach meetings, an online survey of New Braunfels' businesses was conducted to understand further the community's broadband uses and needs. 132 businesses responded to the online survey, with the details being provided under a separate document referenced in Appendix B.

Based on information garnered, an overwhelming majority of respondents are serviced by one of two incumbent carriers, either Time Warner Cable (59%) using coaxial cable platform or AT&T DSL (19%) using copper twisted pair platform. The main reasons the Internet is used in these businesses include email, e-commerce, e-support, web advertising, online research, online banking, and social media. The industries represented in the survey included: Accommodation and Food Services; Agricultural & Farming; Arts, Entertainment, and Recreation; Construction; Educational Services; Finance and Insurance; Healthcare and Social Assistance; Hospitality; Manufacturing; Professional, Scientific, and Technical Services; Real estate, Rental and Leasing; Retail Trade; Transportation and Warehousing; and Miscellaneous Others.

With the majority of New Braunfels' businesses still utilizing copper-based broadband infrastructure to transmit information from a user to the internet, DSL and cable networks have provided sufficient bandwidth to only 69% of responding business users. As bandwidth needs have grown, businesses demand more and more bandwidth out of these systems to support more applications and devices. In reaction to the growing bandwidth needs, DSL and cable networks are trying to evolve technologies to provide more bandwidth to businesses. Broadband providers have continued to upgrade equipment and networks (e.g. Fiber-to-the-Node) to make these lines faster and more reliable, however; according to the survey results, 81% of the businesses stated that limited speed and unreliability are still two of the more urgent issues they encounter on a day-to-day basis. There also exists several fundamental issues with copper infrastructure that pose long-term challenges to the growing bandwidth demand:

- Broadband signals degrade significantly as distances increase in copper-based networks.
- Broadband signals are susceptible to electrical interference and signal degradation in copper-based networks, particularly as they increase in age.
- Copper-based networks delivering broadband services generally utilize shared bandwidth among pools of users that results in an uneven distribution of speed to these users.

A small percentage of the businesses, who have found copper technology limitations untenable, have deployed fiber-optic technology through a direct-connect infrastructure, however the costs for deployment of this platform is cost-prohibitive for most businesses. Only 15 of the approximate 5600 business in New Braunfels currently utilize a FTTP platform (< 1%).
Business owners in New Braunfels are struggling with quality broadband availability and have observed much greater broadband investment from incumbent providers and Google in San Antonio and Austin, leaving New Braunfels to cope with their current infrastructure provided primarily by Time Warner Cable and AT&T. One business interviewed stated that cost of TWC service for speeds offered is too high and they have had issues with reliability of internet. They switched to AT&T for about a week but switched back because they couldn't get the internet working from them. They are very frustrated with customer service between both companies. When internet goes down it basically shuts down their business. Issues seem to occur monthly. When they occur it seems to last for a couple of days.

The two largest providers of internet access in New Braunfels, Time-Warner Cable and AT&T have publicly acknowledged that their current solutions do not meet the upcoming broadband demands, but are taking different approaches to provide solutions. Time-Warner has publicly stated that they believe that their current cable platform technology can continue to evolve to allow greater speeds, but even with the latest technology upgrade, they cannot match the speeds nor bandwidths of the next-generation FTTP platforms. AT&T has announced that it will replace DSL with FTTP over time, but it is focusing initially on the top 100 cities over the next five to ten years. For other communities, AT&T is looking to install Fiber-to-the-Node ("FTTN") technology which installs fiber to centralized distribution points, but still employs DSL and its inherent limitations from the distribution point to the premise.

Along with technology issues, businesses scored customer service from the incumbent providers as average at best and there is an overall feeling that providers are comfortable in the market, and therefore there is no real competition to drive better service. According to the latest American Customer Satisfaction Index (ACSI), Time Warner Cable ranks the lowest of all internet providers with a score of 54 out of 100. This was a -14.3% change from the previous year. AT&T had a score of 65 out of 100 with no improvement from previous year.[3]

Summary of some key survey areas:

85% Respondents that are businesses with 50 or fewer employees.

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[3] 2015 American Customer Satisfaction Index, ACSI and its logo are Registered Marks of the University of Michigan
84% Businesses that have experienced moderate, severe, or total disruption of their business from internet problems with reliability and speed.

69% Businesses confirm or feel that current internet services are insufficient for their business needs.

Of the businesses with insufficient internet, there are four main hurdles why businesses are reluctant or unable to upgrade services to mitigate the above insufficiencies.
Businesses that indicated that having choice and access to multiple internet and broadband providers is important to their business.

Further adding to business owner frustration, GVTC Communications (a local telephone cooperative) is rapidly building and expanding fiber optic and broadband offerings in the region immediately surrounding New Braunfels which businesses cannot participate.

Central Texas Technology Center (CTTC) is a member of the Regional Center of the Alamo Colleges. Content for classes come from a number of the University of Texas and Texas Tech campuses. CTTC currently has two T-1 lines from AT&T, but feel they need more. Between just the online learning system and the Polycom phone system much of their existing bandwidth is consumed. CTTC feels that they need at least four T-1 lines right now to adequately deliver service to their campus but cannot get them from AT&T because there is no more capacity at that location to install additional lines. Due to their location in the New Braunfels Airport property, they cannot get cable service from TWC at all. Due to bandwidth limitations, they cannot partner with NETnet to bring additional programs, services and opportunities to their students. NETnet is a Consortium of 14 higher education institutions to bring a wide range of instruction to Texas counties containing 46% of the rural Texas population. Besides capacity issues, they average about 7 hours of downtime a month.

In summary, there is a large pent up demand for a majority of businesses in New Braunfels for better, more reliable, and affordable service. Although broadband service is available throughout the New Braunfels business corridor, it is service that is architected on older legacy copper technologies and it does not present the level of service that the businesses desire or need. Without expansion of broadband service in New Braunfels, the community is at risk of losing existing businesses and opportunities to relocate business into New Braunfels due to the lack of advanced broadband services and fiber optic delivery options. Although fiber optic service is available to businesses in New Braunfels, businesses perceive the service to be very expensive, to the point where it is prohibitive, and not available at speeds greater than 10/10 Mbps without becoming extremely overpriced.

In terms of attracting new business, a key focus of the New Braunfels' economic development organizations is to target businesses in the technology, software development and other professional service sectors, all which are dependent on highly automated technology. Broadband is a fundamental utility asset that these types of businesses will require, as they will rely on broadband to maintain
connectedness to the electronic world. The majority of these types of businesses rely on online services to maintain their daily operations, therefore; it is critical that New Braunfels is able to promote the availability and affordability of broadband services in its recruitment efforts. This can be a true differentiator for New Braunfels; through promotion of the community's leading-edge broadband services, prospective businesses and site selectors can be assured that they can locate in the region and have robust access to the rest of the electronic world. Available and affordable high-speed broadband has also gone beyond being a differentiator to being a key part of the “minimum ante” for attracting and retaining desirable businesses and facilities. Additionally, the Chamber of Commerce has been advocating for a “Digital New Braunfels” economic development message designed to attract gaming and movie production industries into the New Braunfels region. The Chamber believes broadband infrastructure is key to moving this concept forward.

Over 58% of New Braunfels’ GDP is produced by businesses with less than 100 employees. Small and medium businesses need high-quality broadband to grow and compete.
4. Future of Business Broadband Demand in New Braunfels?

A. Overview

Accessible, affordable, and reliable broadband services is a key economic development tool to attract and retain businesses in New Braunfels. In many cases, bandwidth consumption outpaces the broadband speeds local businesses are able to purchase and upgrading is often times not an option due to the prices businesses are able to afford as well as other IT related factors. When these broadband services cannot “keep up” with business needs, businesses lose productivity and efficiency; affecting their bottom line and making them less competitive with regions having more widely deployed and affordable broadband services. This will eventually result in a less competitive business market from an economic perspective. It also leads to retention issues as businesses that are not able to gain efficiencies with their existing broadband services will, in many cases, move operations to communities that have more availability of these services.

New Braunfels' business market is predominately made up of small to medium sized businesses. These are the same businesses that need high-speed fiber based broadband infrastructure yet, are hampered by the current legacy copper offerings. In many cases, these businesses reported taking services from two different providers, i.e., DSL from AT&T and cable service from Time Warner. Businesses reported doing so because they could not rely on a single connection to maintain their connectivity needs. This doubles the costs for the business.

In terms of attracting new business, a key focus of the New Braunfels’ economic development organizations is to target businesses in the Aviation-Related, Healthcare & Related Medical Technologies, Data Centers, Logistics/Distribution, Telecom/Information, Specialty Foods, Automotive Suppliers, and Music Industry sectors[4], all which are dependent on highly automated technology. Broadband is a fundamental utility asset that these types of businesses will require, as they will rely on broadband to maintain connected to the electronic world. The majority of these types of businesses rely on online services to maintain their daily operations, therefore; it is critical that New Braunfels is able to promote the availability and affordability of broadband services in its recruitment efforts. This can be a true differentiator for New Braunfels; through promotion of the community’s leading-edge broadband services, prospective businesses and site selectors can be assured that they can locate in New Braunfels and have robust access to the rest of the electronic world. Available and affordable high-speed broadband has also gone beyond being a differentiator to being a key part of the “table stakes” for attracting and retaining desirable businesses and organizations.

B. Applications

Today, business broadband subscribers across every class are utilizing more and more online services and particularly those that consume larger amounts of high-quality bandwidth. Figure 4-1 and Figure 4-2 illustrate demands for applications today and the increases in broadband that are necessary to accommodate this demand. Currently, broadband subscribers make heavy use of the core internet functions, consisting of internet browsing, web hosting, e-commerce, virtual private network connectivity, and voice services. However, subscribers are beginning to consume more real time video and streaming applications, which require significant bandwidth, reliability, and performance out of their broadband connections. We are still early in the lifecycle of internet video applications and these are expected to grow significantly over the next 10 years, replacing much of the text-based internet.

Figure 4-1: Broadband Application Speed Requirements
In addition, the myriad of cloud services is driving the need for more symmetrical broadband as real time and cloud applications require additional bandwidth, both in download speed and upload speed. As more of these applications are deployed and replace traditional PC-based software, broadband connections will need to accommodate the increased bandwidth load. Many times these applications synchronize in real time, meaning that they are always consuming bandwidth at a constant rate rather than only when the user is actively engaging the application.

The proliferation of mobility needs and devices is also driving the need for more bandwidth as more devices in the business and public areas need access to broadband connections. A report published by Google in 2012 demonstrates the amount of time the average user spends with their devices across each type of device, and how users interact with multiple devices simultaneously. Although the study's primary

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(5) Symmetrical broadband connections provide equal download and upload speeds, such as 10 Mbps down, 10 Mbps up, instead of traditional asymmetrical broadband services that provide unequal speeds, such as 10 Mbps down and 2 Mbps up.
goals were to "gain a deep understanding of consumer media behavior over a 24-hour period..." an important implied finding is that users are spending significantly more time with their devices, devices that all require broadband connections. As these devices all vie for bandwidth on a users’ broadband connections, the demand for more bandwidth to support more applications grow.

Figure 4-3: Proliferation of Broadband Devices

These demands also effect many devices inside the business that are now being connected to the internet using broadband connections. Many video/audio systems, thermostats, irrigation and security systems are now connected to the internet, consuming more broadband bandwidth.

C. Economic Development

Accessible, affordable, and reliable broadband services is a key economic development tool to attract and retain businesses in New Braunfels. In many cases, bandwidth consumption outpaces the broadband speeds local businesses are able to purchase and upgrading is often times not an option due to the prices businesses are able to afford as well as other IT related factors. When these broadband services cannot “keep up” with business needs, businesses lose productivity and efficiency; affecting their bottom line and making them less competitive with regions having more widely deployed and affordable broadband services. This will eventually result in a less competitive business market from an economic perspective. It also leads to retention issues as businesses that are not able to gain efficiencies with their existing broadband services will, in many cases, move operations to communities that have these services.

It is evident that the internet has changed the way people live and do business. There is proof of this in almost everything we do. Our lives have been changed forever with the past decades advances in technology. This effect is even more evident in the way small businesses operate daily. A new study just out by the “Internet Association” confirms our observations about the internet and its driving force on part time small business in the U.S. The study, titled “Internet Enabled Part-Time Small Businesses Bolster the U.S. Economy”, explores how Americans, in an attempt to find more revenue during an economic downturn, have turned to the internet to start small businesses and earn extra income.

According to the study, “the internet contributed $141 billion dollars to the US economy in 2011, with the internet helping to drive nearly all part-time businesses, with 90% of all those surveyed using the internet to conduct at least some of their business, and over half saying that they couldn’t conduct business at all without the internet. These businesses employ 6.6 million people, producing wages of $797 million. According to the survey, most small businesses owners that rely on the internet say that if the internet didn’t exist, at least half of their income would go away.”

Beginning in 2011, the NTIA has published statistics on the availability of gigabit broadband. This data has allowed one of the first empirical studies of the benefits of next generation internet connectivity on economic activity. Looking at 14 communities in nine states, we conclude that next generation broadband is likely to have a substantial impact on economic output and, consequently, consumer welfare. These gains are likely due to numerous factors, including the direct effect of infrastructure investment and increased expenditures, as well as early shifts in economic activity (e.g., job creation and occupational changes) and productivity gains. For example, recent reporting on gigabit broadband service in

Chattanooga, Tennessee has attributed 1,000 new jobs, increased investment, and “a new population of computer programmers, entrepreneurs and investors” to gigabit broadband.[8]

While it is difficult to estimate the exact economic impacts that broadband can have on any community due the complexity of variables that range from adoption and utilization rates to upload speeds, there are some trends that appear to apply generally across all broadband communities.

First, it is important to realize that broadband is an enabler of economic development opportunity. Simply deploying fiber throughout the community is not going to do much in the way of economic development on its own. However, when used as cornerstone of a larger economic development strategy, broadband can be the key differentiator for site development and site location analyses. Moreover, broadband not only supports business and industrial recruitment efforts, but perhaps more important to realize, the availability of broadband has an even larger impact on the ability to retain existing business and industry that is already important to the economy community.

Recent data collected by broadband economist firm Strategic Networks Group (SNG) in 2014-2015, surveyed fiber-connected business leaders in 11 states and asked them to rate the importance that fiber access had on the decision to either relocate their business or remain in the community. Figure 0-1 represents survey results of 3,074 business and industry leaders that rated the importance of availability of fiber during the site selection process. As seen below, nearly 65% of businesses say fiber connectivity was “essential” or “very important” to their decision to select their community. Figure 4-4 represents survey results of 3,684 businesses that had decided to remain or expand in their existing community. As seen, over 80% of businesses said fiber connectivity was “essential” or “very important” in their decision to remain or expand in their current community.

Figure 4-4: Importance that the presence of fiber connectivity had on decision to select a new location.

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[8] From the study “Early Evidence Suggests Gigabit Broadband Drives GDP” by Analysis Group
Therefore, in order to estimate the economic impact that fiber-based broadband can have on New Braunfels, it is important to recognize the importance of retaining the existing business and industry that is supporting the jobs and economy of the community already. These findings stress the importance of local economic development leaders understanding and responding to the needs of existing businesses and industry by offering the advanced networking and communications capabilities that fiber-optic connectivity can offer.

A leading indicator of economic performance in a community is employment, and through the recruitment, retention, and expansion of employers with access to fiber-based broadband, New Braunfels could expect to see an increase in employment due to increased utilization of broadband. Again, drawing from SNG data 2014-2015, 1,103 employers in 11 states with fiber-optic connectivity reported an aggregate employment of 70,171. Of that aggregate total, 3,436 were considered new full-time jobs, and of those new jobs, 1,650 were new jobs attributed to the existence of fiber-based broadband. So in those 11 states, employers with fiber-optic broadband saw an overall increase in employment of 4.9%, with a 2.4% increase in jobs due directly to the existence of broadband.

Another aspect of broadband utilization that often does not get the attention it deserves is the cost savings that broadband can offer a business. While economic developers do tend to look at revenue and growth for economic impacts, equally important are the earnings that attributed to the reduction of operating costs through increased internal efficiencies that broadband can offer. Drawing again 2014-2015 SNG data from 11 states, 259 business establishments reported an aggregate of $458.1M in annual operating costs. Cost savings, in aggregate from those business total $20.6M, for cost savings of 4.3%.

Interesting to note that while the cost savings was 4.3% across all businesses surveyed, the actual cost savings vary by the employment size of the business. While it likely goes without saying that the larger employers realized a greater bottom line operating cost savings, the smaller the employment size of the business, the greater the percentage of cost savings. For example, businesses with 1-4 employees with average operating cost of $298k saw an average cost savings of $40.2k, a savings of 11.9%, while businesses with 20-49 employees with average operating cost of $2.5M saw an average cost savings of $155.2k, a savings of 5.8%. These findings of course, speak to the importance that affordable fiber-based broadband has on small- and medium-sized business.

While simply having access to broadband can lead to business recruitment and business expansion and increased employment, it is essential that meaningful utilization occur so that businesses can realize
significant costs savings, which can then be re-invested in the company and in the community, perhaps through salary increases to employees or to business expansion.

These are all just a few of the variables that go into the potential economic impacts that fiber-optic broadband can have on a community.

In terms of attracting new business, a key focus of the New Braunfels’ economic development organizations is to target businesses in the technology, software development and other professional service sectors, all which are dependent on highly automated technology. Broadband is a fundamental utility asset that these types of businesses will require, as they will rely on broadband to maintain connectedness to the electronic world. The majority of these types of businesses rely on online services to maintain their daily operations, therefore; it is critical that New Braunfels is able to promote the availability and affordability of broadband services in its recruitment efforts. This can be a true differentiator for New Braunfels; through promotion of the community’s leading-edge broadband services, prospective businesses and site selectors can be assured that they can locate in the region and have robust access to the rest of the electronic world. Available and affordable high-speed broadband has also gone beyond being a differentiator to being a key part of the “minimum ante” for attracting and retaining desirable businesses and facilities.

See Appendix B – Economic Development Case Study for a more in-depth review of the impact of fiber to Bristol, Virginia

D. Education

Educational organizations are a major user of broadband in New Braunfels and their needs continue to grow. These include K-12 schools and the Central Texas Technology Center. Online applications used by these organizations require not only high-bandwidth broadband, but also services that meet strict quality and performance requirements to support real-time video and voice applications such as distance learning and teleconferencing. Online textbooks are in use today, and that utilization is only expanding. Texts and teaching resources incorporate multimedia – sound, graphics, video, and data. Many states have also instituted requirements for online testing or are in the process of doing so, creating an even greater need for high-quality broadband services. Additionally, educational institutions are utilizing more online content to support their curricula, from sources such as YouTube, TeacherTube, Vimeo, and Facebook.

Figure 4-6 illustrates the bandwidth requirements per student for common educational applications and the quality and performance requirements of these applications. Basic educational tools, such as web browsing and YouTube consume up to about 1 Mbps per student. However, moving up to more advanced educational technologies such as streamed classroom lectures and 2-way video teleconferences use significantly more bandwidth per student, 4 Mbps and 7 Mbps, when combined with the basic educational tools. In addition, these advanced tools require not only more bandwidth but also strict broadband quality metrics that allow them to function properly, such as low latency and higher upload speeds.
Figure 4-6: Bandwidth Demands for Educational Technologies Per Student

The New Braunfels Public School District is comprised of eight elementary, two middle, and one senior high school and nearly 8,400 students. The district participates in the federal E-Rate program with an average subsidy rate of 59%; meaning that 59% of its broadband connectivity and internet costs are paid for by the federal government through the E-Rate program. E-Rate is the commonly used name for the Schools and Libraries Program of the Universal Service Fund, which is administered by the Universal Service Administrative Company (USAC) under the direction of the Federal Communications Commission (FCC). The program provides discounts to assist schools and libraries in the United States to obtain affordable telecommunications and internet access. It is one of four support programs funded through a Universal Service fee charged to companies that provide interstate and/or international telecommunications services, and this fee is passed on to consumers on their telecommunications bills. Since all households that consume video and/or telephone service are required to pay into the Universal Service Fund, it is important that communities maximize their participation in the E-Rate program to help recoup the investment made by their residents that pay into the fund.

New Braunfels Public Schools obtains its broadband connectivity and Wide Area Network (WAN) internet services through a purchase of its own fiber transport with an agreement with New Braunfels Utilities for operations and maintenance. The district has several technology initiatives including the use of Google Apps, online subscription based book services, and online testing. 1:1 initiatives are in the early stages, however robust high-speed wireless networks will be required on campus and in school facilities to support a wide deployment to the students. They are also pursuing iPads for grades 5-12 and Bring Your
Own Devices (BYOD) in grades 5-12. BYOD will allow students to bring their own devices to use at school. If a student does not have a device, the schools have the ability to loan the student one using a “check out” process.

The Comal Independent School District (CISD) is a 563 square mile district comprised of 18 elementary, five middle, and four senior high school and nearly 17,000 students. CISD currently has fiber connections only in its New Braunfels location. Time Warner Cable is the internet provider with 1Gbps fiber into the main data center. The network is provided via leased lines at a very high cost. Outside of high costs, bandwidth issues have caused limitations in services such as the BYOD option for students. The ability to launch any new technology initiatives will be hampered in the future.

Central Texas Technology Center (CTTC) is a member of the Regional Center of the Alamo Colleges. Content for classes come from a number of the University of Texas and Texas Tech campuses. They are already experiencing bandwidth issues impacting their ability to bring state-of-the-art curriculum and services to its students and faculty. Information Security, Business Administration, and Nursing programs are primary areas of studies at this campus. Enrollment is approximately 1000 degree seeking and 2400 from the workforce. The campus is expanding with a new building that will more than double degrees seeing enrollment in the near term. If fiber were available, they would like at least 100 Mbps minimum through 2019. After 2019 they feel they would need at least 150 Mbps.

The CTTC is funded by the State of Texas and would switch to a fiber based service immediately if it were to become available and feels that educational opportunities would expand for the community of better service were available.

E. Healthcare

Broadband is crucial for New Braunfels' healthcare providers that are interested in meaningfully leveraging electronic health records, as many of the capabilities of health IT such as telehealth and electronic exchange of health care information, require high performance broadband capability. New Braunfels’ major hospitals currently maintain access to high-speed broadband services but beyond these organizations, few healthcare providers maintain this type of access. Doctor's offices, clinics, and imaging centers all have growing broadband needs to ensure they stay connected as their organizations transition to the digital healthcare environment. For these smaller organizations, high-speed broadband becomes a critical need to fulfill their mission and long-term success.

Some of the largest healthcare providers have noted a push from many independent providers to a Healthplex style of patient care, which will require more bandwidth and connectivity, as many physicians come together at one location to deliver more efficient care. Each Healthplex will need to communicate back to their affiliated hospitals and imaging center facilities. Redundancy is critical for these facilities, as a loss of connectivity can become a life-endangering event for patients. Christus reported, due to provider limitations, costs, etc., only acute care hospitals have diverse and redundant circuits.
Future needs of healthcare providers in New Braunfels will continue to grow. As a guide, the FCC has released minimum recommended broadband speeds for healthcare organizations, as part of its Healthcare Connect program. These speeds should be considered minimum requirements and New Braunfels’ healthcare organizations should have access to more bandwidth if needed.

Single Physician Practice – 4 megabits per second (Mbps)
- Supports practice management functions, email, and web browsing
- Allows simultaneous use of electronic health record (EHR) and high-quality video consultations
- Enables non real-time image downloads
- Enables remote monitoring

Small Physician Practice (2-4 physicians) – 10 Mbps
- Supports practice management functions, email, and web browsing
- Allows simultaneous use of EHR and high-quality video consultations
- Enables non real-time image downloads
- Enables remote monitoring
- Makes possible use of HD video consultations

Nursing home – 10 Mbps
- Supports facility management functions, email, and web browsing
- Allows simultaneous use of EHR and high-quality video consultations
- Enables non real-time image downloads
- Enables remote monitoring
- Makes possible use of HD video consultations

Rural Health Clinic (approximately 5 physicians) – 10 Mbps
- Supports clinic management functions, email, and web browsing
- Allows simultaneous use of EHR and high-quality video consultations
- Enables non real-time image downloads
- Enables remote monitoring
- Makes possible use of HD video consultations
Clinic/Large Physician Practice (5-25 physicians) – 25 Mbps

- Supports clinic management functions, email, and web browsing
- Allows simultaneous use of EHR and high-quality video consultations
- Enables real-time image transfer
- Enables remote monitoring
- Makes possible use of HD video consultations

Hospital – 100 Mbps

- Supports hospital management functions, email, and web browsing
- Allows simultaneous use of EHR and high-quality video consultations
- Enables real-time image transfer
- Enables continuous remote monitoring
- Makes possible use of HD video consultations

Academic/Large Medical Center – 1,000 Mbps

- Supports hospital management functions, email, and web browsing
- Allows simultaneous use of EHR and high-quality video consultations
- Enables real-time image transfer
- Enables continuous remote monitoring
- Makes possible use of HD video consultations

F. Public Safety

We live in a changing world where public safety agencies must address new threats and challenges both natural and man-made. It is no longer enough for first responders to rely on a push-to-talk (PTT) network for situational awareness. Police, fire, and emergency medical services (EMS) play the central roles in emergency response. Mobile technology capable of sending and receiving bandwidth-intensive information can help first responders do their jobs much more effectively and safely. These emergency response organizations need broadband networks that let them share streaming real-time video, detailed maps and blueprints, high resolution photographs, and other files that today's public safety and commercial wireless networks cannot handle, especially during major events or catastrophes.

Broadband technology and infrastructure is critical to the success of our first responders because it provides them with enhanced situational awareness in emergencies. By leveraging broadband networks, public safety organizations can gain access to site information, video surveillance data, medical information or patient records, and other information that would be useful in an emergency. These networks also support and improve 9-1-1 Public Safety Answering Points (PSAPs) response time and efficiency by establishing a foundation for transmission of voice, data, or video to the responding entity.
New broadband technologies give first responders new tools to save lives. These tools include:

- Next-Generation Radio Systems;
- Advanced Security Camera Systems;
- Gunshot Detection Systems;
- Chemical, Biological, Radiological, Nuclear, and Explosives Sensor Systems;
- Body-Worn Cameras; and
- Next-Generation Wireless Data Systems.
G. Community Support

In order for a community to thrive and grow, community support organizations must be in place. Organizations such as local chambers of commerce, human services organizations, churches, and other organizations that help connect people to the services they need in the community. These organizations traditionally access the needs and resources available in the community and collect the data necessary to help fill the gaps in services and investigate opportunities to solve community problems and issues.

Broadband plays a vital role in helping these types of organizations fulfill their missions. Whether it is as simple as a community church streaming their weekly service or the local chamber of commerce advertising their latest event through their web presence and email, broadband equips these organizations with one of the most critical communication tools necessary to ensure they are successful in their support roles.

Broadband availability inspires these organizations to be innovative in their use of technology and brings a higher level of welfare to the communities they serve. Take for example All Saints Church in rural Norfolk County, UK. The church is utilizing its spire (the tallest structure in the area) to deliver wireless internet service to the surrounding community. Now, in a community that was lucky to see speeds up to 1 Mbps, now speeds of over 8 Mbps are not uncommon. This community support organization has brought broadband service into an area that was previously underserved and is helping to bridge the digital divide that plagues many communities around the globe.
H. Smart City Innovation

Broadband networks become key drivers of efficiency and innovation as more and more municipal applications are enabled online. As cities expand online services, broadband will become an even more critical component of the daily operations to serve communities. Applications migrated to a community network enjoy greater availability and increased bandwidths over what has traditionally been available; creating a more effective and efficient municipal organization. High-speed, reliable broadband enables these organizations to:

- Improve operational efficiencies;
- Reduce direct and indirect costs;
- Enable new interactions with citizens and businesses;
- Respond more quickly to the local community;
- Ensure better preparedness in times of emergency;
- Provide enhancements to public safety;
- Provide more information to citizens and businesses; and
- Better serve the local community.

Municipal fiber is capable of much more than just providing broadband services. It can provide a publicly owned communications infrastructure that can be used for additional public benefits, including enhanced municipal utilities, new e-government applications, technology collaboration, and infrastructure sharing programs. In addition, a municipally owned network can provide a platform for long-term innovation of Smart City technologies and applications, ranging from smart homes to energy conservation and management to green building programs. While the initial goal of this infrastructure is to enhance local broadband services, it will become a long-term asset to support Smart City programs that increase efficiency, lower cost, reduce environmental impact, and enhance quality of life.

As a future Smart City, the City of New Braunfels will take advantage of new and emerging digital technologies to enhance the wellbeing and efficiency of its community, reducing cost, and resource consumption while more effectively engaging its citizens. Smart Cities are more efficient at responding to local, national, and global challenges and position themselves to be more successful than other communities that do not leverage these new technologies.

Through the implementation of a wireless sensor network that utilizes the city's fiber network infrastructure as a platform, the City of New Braunfels can take advantage of the rising popularity of “Internet of Things” technologies. This will allow the city to monitor many components of the city's infrastructure in real time such as traffic networks, power networks, water and sewage control systems, and street lighting. By actively monitoring these and other systems in real time, the city can more proactively adjust services to better meet the needs of the community while reducing costs by gathering data to conduct efficiency studies on how the services are delivered. The data collected could potentially be used to reduce energy consumption, increase operational efficiencies,
deliver an overall higher quality of service to the community. A few of technologies that are being examined for New Braunfels include:

I. Smart Trash Containers

Smart Trash Containers are emerging technology that has been successfully implemented in several communities around the globe. These systems rely on embedding refuse containers with wireless sensor technology to monitor and remotely alert when the containers are at capacity and need to be emptied. By alerting only when a container is full, this saves the personnel collecting the refuse time by not having to check or empty containers that are empty or only partially full. Additionally, data can be collected with regard to the rate the containers are reaching capacity and thus allow the waste management service providers to adjust their service in real time to better meet the needs of the community. This technology can also help to determine the best placement of containers geographically in the region and predict with additional capacity may be needed in a service area.

J. Street Temperature & Air Quality Sensors

By establishing an air quality monitoring system, the City of New Braunfels can enhance their understanding of the quality of life within the community. Relationships between air pollutants and human health can be discovered by combining the data of air quality and health outcomes. By establishing early warning thresholds, health risks to the community can be reduced. Many studies on air quality monitoring employ expensive instrumentation to measure variations of air pollution on a large scale and covering vast geographic regions. The newer trend is to establish street-level monitoring systems that can report on areas that are more specific and generate more granular and accurate data.

Establishing a street-level monitoring system of air quality can assist in exploring fine-scale relationships between air pollutants and people. The sensors of a street-level monitoring system can capture fine-scale spatial-temporal variations of air quality and the information gathered can help local leaders gain a more realistic view of the quality of life in New Braunfels. With the rapid growth of the manufacturing process in semi-conductor technology resulting in smaller chip sizes and new sensing materials, lower-power consumption and better measurement accuracy can be achieved simultaneously. It is now possible to deploy an effective wireless sensor network in urban settings for studies on environmental monitoring.

K. Smart Street Lighting Systems

The businesses and residents of New Braunfels can benefit from the implementation of a Smart Street Lighting system. These types of systems employ high efficiency Light Emitting Diode (LED) technology to replace traditional incandescent bulb. In power savings alone, LEDs have demonstrated to be approximately 90% more energy efficient than traditional bulb solutions; however, simply replacing the existing bulbs with LEDs does not create an intelligent lighting system.
The “Smart” components refer to the system being able to adapt in real time to the movements of pedestrians, cyclists, and automobiles. These systems will dim when no activity is detected and brighten when people or vehicles are present. Additionally, Smart Street Lighting Systems may be used to both deliver and receive data in the future creating useful “LiFi” networks that can provide greater and more efficient coverage than current “WiFi” networks.

- Benefits that result from this type of technology include:
  - Large energy savings from LED technologies and ability to dim lights during low activity levels;
  - Reduced maintenance costs because of the long life cycle of LED lights;
  - Reduced CO₂ emissions due to reduced energy consumption; and
  - Higher Quality of Life due to reduction of light pollution due to dimming.
L. Smart City Innovations through Municipal Fiber Networks

Broadband Services
- Common backbone for all anchors
  - County & City
  - Schools
  - Libraries
  - Hospitals
  - Clinics
  - Public Safety
  - Community Support
- Interconnection with service providers
- WiFi in public centers

IT Collaboration
- E-Government applications
- Bulk internet purchasing
- Application sharing
- Disaster recovery
- EOC communications

Public Safety Applications
- Video monitoring
- First responder support
- Collaboration with State & Federal agencies
- FirstNET preparedness

Future Energy & Utility Management
- Smart Grid & Demand Response
- Automated Meter Reading
- Advanced Metering Infrastructure
- SCADA communications and control
5. Opportunity Assessment - What Impact Can The City Have on Local Broadband?

The primary objectives of employing the city’s fiber optic network, broadband-friendly public policies, and strategic investments are to improve access and availability of broadband services in New Braunfels. These tools are utilized to increase the supply of broadband infrastructure that is available to serve New Braunfels’ businesses, residents, and community anchors. A number of benefits can be realized by expanding access and availability of broadband in New Braunfels, including:

A. Improving Affordability

By leveraging broadband assets that are already available within the city, the amount of new broadband construction is limited, reducing the investments necessary to provide services to subscribers. The cost of new broadband construction within the city may range from $50,000 - $100,000 per mile of fiber-optic infrastructure, depending on the location. In places where the city already has available conduit and fiber-optic infrastructure, “overbuilding” may not be necessary by broadband service providers, which will help them reduce their total costs to provide services to end users. In some cases, costs for broadband construction are directly passed on to end users in the fees collected by broadband service providers. In other cases, these costs become part of a broadband service provider’s total cost of services from which standard rates for residential and business broadband services are derived. In both cases, the costs for broadband construction increase broadband service providers’ “bottom line.” Reducing these costs where feasible can positively impact costs for these providers and in turn, can lower the rates paid by subscribers.

B. Increasing Adoption

Broadband adoption is influenced by two key factors, relevancy, and affordability. The city has the opportunity to improve affordability by leveraging its fiber-optic network and making measured investments in additional infrastructure. Affordability and adoption of broadband services are positively correlated. As affordability increases, so does adoption. The city can positively influence adoption by negotiating agreements with broadband service providers to provide “lifeline” internet services at low costs for disadvantaged residents, small businesses and other targeted populations in exchange for discounted use of its broadband assets. These incentive programs can help broadband service providers deploy more quickly and at lower costs in exchange for their participation in such lifeline programs.
C. Improving Public Efficiency and Effectiveness

Leveraging the city’s broadband assets to connect more public institutions throughout the community creates the opportunity to establish collaborative technology programs across multiple organizations. Establishing institutional access to the city’s conduit and dark fiber networks would create a high-speed, inter-governmental backbone through which these organizations could collaborate with one another on Information Technology and communications projects. Connecting schools, libraries, local government, public safety, and community organizations to one another could facilitate the sharing of technology resources among the organizations connected. Some of the potential benefits may include cost reductions through joint volume purchasing agreements, application sharing, and improvements to emergency operations and communications.

D. Reducing Taxpayer Spend

Improving public efficiency and effectiveness should reduce the costs of government to the local taxpayer. If employed effectively, New Braunfels’ broadband initiatives can become a tool that facilitates cost reductions, not only for the city itself but also for other public organizations across the city, including schools, libraries and other community organizations. An inter-governmental network connecting these public organizations should consolidate the purchasing power of all agencies for common information technology and communications services, resulting in lower overall costs. The network can also “futureproof” the connectivity needs of these public agencies and protect them from cost increases, as they require additional bandwidth.

E. Reducing Lead Times for Installation

The time to install and activate end users’ broadband services is significantly determined by the availability of infrastructure in the area. Businesses are negatively impacted by fiber construction lead-times that may result in delays to activate their services. 30 days is the typical industry standard lead-time for activation of fiber-optic broadband services, without a provision for special construction. In many cases, the lead-time may double or triple depending on how much additional fiber construction is necessary to reach the end user’s location. The city’s conduit and dark fiber infrastructure can be used to supplement existing broadband service provider infrastructure to reduce these lead times.

F. Supporting Reliability and Performance

New Braunfels’ broadband assets can be used to support the reliability and performance of broadband services across the city. These assets can be employed to provide new physical route diversity to the networks of existing broadband service providers and increase capacity in existing routes. They can be used to increase backhaul capacity in areas of the city that are near or at their limit and equip more commercial towers with dark fiber connectivity, increasing the bandwidth.
available to mobile carriers serving New Braunfels' wireless needs. Community anchors can utilize these assets to achieve significant upgrades in speed and connectivity between their facilities as well as diversity for their primary connectivity.
6. Broadband Business Models Overview

Selecting the right business model for New Braunfels’ broadband strategy depends greatly on the specific environment, market, needs, appetite for risk, funding availability, payback, and return requirements. The commonly implemented business models fall on a continuum that begins with low risk, low impact options and ends with high risk, high impact options. Figure 6-1 illustrates this continuum. As New Braunfels evaluates the various business model options from left to right, it will encounter greater degrees of risk and reward; risk, in terms of financial, operational, and regulatory risk; reward, in terms of community benefits, revenue generation, and overall profitability. New Braunfels must determine the most appropriate risk/reward balance to achieve its goals. To do so, Magellan has evaluated each business model to hone in on those that are most feasible for New Braunfels to consider. This evaluation accounted for local market, competition, funding requirements, organizational capabilities, and the regulatory environment.

A. Policy Participation Only

Under this option, New Braunfels utilizes its public policy tools to influence how broadband services are likely to develop in the region. This includes permitting, right of way access, construction, fees, and franchises that regulate the cost of constructing and maintaining broadband infrastructure within its jurisdiction. This option is not considered a true business model, but does significantly affect the local broadband environment and is therefore included as one option. Municipalities that do not wish to take a more active role in broadband development often utilize policy participation to positively impact the local broadband environment.
Example: Santa Cruz County, CA

The Santa Cruz County board of supervisors in November 2013 approved an eight-month timeline to overhaul its broadband infrastructure plans and regulations. Specific areas of focus include permitting fee reductions and a proposed “dig once” ordinance that would make it easier to install new fiber-optic cables during other work on area roads or utilities lanes. “The county will continue a focus on broadband infrastructure throughout the county to enable businesses to function in the digital era, and students and households to have high quality access to information and communication. The county will work with industry providers to develop a Broadband Master Plan in order to identify focus areas within the county that will be most suitable for gigabyte services, particularly as the Sunesys backbone line is constructed during 2014 and 2015. The county will work with service (last mile) providers to ensure that these focus areas are deemed a priority, in order to support streaming requirements, product development, job creation and online selling capability.”

B. Infrastructure Provider

New Braunfels leases and/or sells physical infrastructure, such as conduit, dark fiber, poles, tower space, and property to broadband service providers that need access within the community. These providers are often challenged with the capital costs required to construct this infrastructure, particularly in high cost urbanized environments. The municipal infrastructure provides a cost effective alternative to providers constructing the infrastructure themselves. In these cases, municipalities generally use a utility model or enterprise fund model to develop programs to manage these infrastructure systems, and offer them to broadband service providers using standardized rate structures.

Example: City of Palo Alto, CA

In 1996, Palo Alto built a 33-mile optical fiber ring routed within the city to enable better internet connections. Since then, we have been licensing use of this fiber to businesses. For the past decade, this activity has shown substantial positive cash flow and is currently making in excess of $2 million a year for the city. We now have that money in the bank earmarked for more fiber investments.”

C. Government Services Provider

If New Braunfels becomes a government service provider, it will utilize its fiber-optic network to interconnect multiple public organizations (community anchor institutions) with fiber-optic or wireless connectivity. These organizations are generally limited to the community anchors that fall within their jurisdiction, including local governments, school districts, higher educational organizations, public safety organizations, utilities, and occasionally healthcare providers. The
majority of these anchors require higher capacity connectivity and often, the municipal network provides higher capacity at lower costs than these organizations are able to obtain commercially. Local government networks across the country have been built to interconnect cities, counties, school districts, and utilities to one another at lower costs and with long-term growth capabilities that support these organizations’ future needs and protect them from rising costs. In these cases, entities extending networking to CAIs may be cities, counties, or consortia that build and maintain the network. The entities utilize inter-local agreements between public agencies to establish connectivity, rates and the terms and conditions of service.

Example: Seminole County, FL

Seminole County owns and operated a 450-mile fiber-optic network that was installed over the past 20 years by the county’s Public Works departments primarily to serve the needs of transportation. Since that time, the network has grown to connect the majority of the county’s facilities, five cities within Seminole County, Seminole Community College, Seminole County Schools, and other public network to a common fiber-optic backbone. The network has saved millions of dollars in taxpayer dollars across the county and has become a long-term asset that enables the county and the other connected organizations to meet their growing connectivity needs.

D. Open-access Provider

Municipalities that adopt open-access generally own and operate a substantial fiber-optic network in their communities. Open-access allows these municipalities to “light” the fiber and equip the network with the electronics necessary to establish a “transport service” or “circuit” for service providers interconnecting to incorporate additional capacity and connectivity into their local network. Service providers are connected from a common interconnection point with the open-access network and have access to all customers connected to that network. Open-access refers to a network that is available for any qualified service provider\(^9\) to utilize in order to connect their customers. It allows municipalities to provide an aggregation of local customers on a single network that service providers are able to compete for efficiently and cost effectively to provide services. The concept of open-access is designed to enable competition among service providers across an open network that is owned by the municipality. The municipality remains neutral and ensures non-discriminatory practices and access for all providers who operate on the network. The municipality establishes a standard rate structure and terms of service for use by all participating service providers.

Example: City of Palm Coast, FL

\(^9\) “Qualified” can mean an entity that has been certificated and authorized by the state’s public utilities commission.
In 2006, the Palm Coast City Council approved a 5-Year fiber-optic deployment project funded at $500,000 annually for a total investment of $2.5 million. The network was developed to support growing municipal technology needs across all public organizations in the area, including city, county, public safety, and education. It was also planned to support key initiatives such as emergency operations, traffic signalization, collaboration, and video monitoring. The city utilized a phased approach to build its network using cost-reducing opportunities to invest in new fiber-optic infrastructure. As each phase was constructed, the city connected its own facilities and coordinated with other public organizations to connect them; incrementally reducing costs for all organizations connected to the broadband network. Showing a reasonable payback from each stage of investment allowed the city to continue to fund future expansion of the network. Through deployment of this network, the city has realized a savings of nearly $1 million since 2007 and projects further annual operating savings of $350,000 annually. In addition to these savings, the city’s network provides valuable new capabilities that enhance its mission of serving the residents and businesses of the community.

E. Retail Service Provider – Business Only

Municipalities that provide end users services to businesses customers are considered retail service providers. Most commonly, municipalities provide voice and internet services to local businesses. In many cases, a municipality may have built a fiber network for the purposes of connecting the city’s primary sites that has been expanded to connect local businesses, in effort to support local economic development needs for recruitment and retention of businesses in the city. Municipalities that provide these services are responsible for managing customers at a retail level. They manage all operational functions necessary to connect customers to the network and provide internet and voice services. Municipalities compete directly with service providers in the local business market, which requires the municipality to manage an effective sales and marketing function in order to gain sufficient market share to operate at a break-even or better. This may or may not require certification and authority from the state’s public utilities commission.

Example: Fort Pierce Utilities Authority

Primary FPUAnet services are Dedicated Internet Access, fiber Bandwidth Connections, E-Rate IP Links, and Dark Fiber Links. FPUAnet services also include Wireless Broadband Internet and Wireless Bandwidth Connections, which extend FPUA’s fiber through wireless communications. The FPUAnet Communications mission statement is “To help promote economic development and meet the

(10) This does not preclude provision of open access network services for use by service providers in serving residential customers also.
needs of our community with enhanced, reasonably priced communications alternatives. It all began around 1994, when FPUA began to build a fiber-optic network to replace leased data links between its buildings in Fort Pierce. The new optical fiber system proved more reliable and cost effective, and was built with sufficient capacity for external customers. In 2000, FPUA allocated separate fibers through which it began to offer Dark Fiber Links to other institutions. This soon expanded to include businesses and more service types.

F. Retail Service Provider – Business & Residential

Municipalities that provide end users services to businesses and residential customers are considered retail service providers. Most commonly, municipalities provide voice, television, and internet services to their businesses and residents through a municipally owned public utility or enterprise fund of the city. As a retail service provider that serves businesses and residents, the municipality is responsible for a significant number of operational functions, including management of its retail voice, television and internet offerings, network operations, billing, provisioning, network construction, installation and general operations and maintenance. The municipality competes with service providers in the business and residential markets and must be effective in its sales and marketing program to gain sufficient market share to support the operation. Many municipalities that have implemented these services are electric utilities that serve small to midsize markets, which already operate and maintain a fiber optic network for internal uses. Many of these markets are rural or underserved in areas that have not received significant investments by broadband service providers. Retail service providers must comply with state and federal statutes for any regulated telecommunications services. These organizations must also comply with state statutes concerning municipal and public utility broadband providers; a set of rules has been developed in most states that govern the financing, provision, and deployment of these enterprises. This may or may not require certification and authority from the state’s public utilities commission.

Example: Bristol Virginia Utilities (BVU OptiNet)

BVU OptiNet is a nonprofit division of BVU, launched in 2001, that provides telecommunication services to approximately 11,500 customers in areas around Southwest Virginia. OptiNet is known for its pioneering work in the area of municipal broadband throughout the area. BVU is acknowledged as the first municipal utility in the United States to deploy an all-fiber network offering the triple play of video, voice and data services. Offering digital cable, telephone service, and high-speed internet from a remote-area utility provider makes BVU exceptional, even on a global level.
### Figure 6-2: Comparison of Business Models

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<th>Public Private Provider</th>
<th>Retail Business Provider</th>
<th>Retail Business &amp; Residential Provider</th>
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7. Retail Business Models

New Braunfels has many business model options available to affect its citizens’ access to broadband services. However, through analysis of information received from the City of New Braunfels and New Braunfels Utilities as it pertains to an acceptable risk/reward spectrum, certain business models are not complementary and appear through this Study’s analysis to be impractical for New Braunfels. With this in mind, Magellan does not recommend that New Braunfels consider providing subscriber-based retail services (e.g. internet, voice, video, wireless, etc.) as part of its broadband initiative.

The reasons to exclude retail models are as follows:

1. **Lack of political support in becoming retail provider** - While participating in outreach and stakeholder meetings, it became evident that many of the key stakeholders would not support the city becoming a retail provider directly competing with the other providers in market. It was felt that this was not a good role for New Braunfels and that it should focus more on investing in infrastructure and investigating public-private partnerships.

2. **State laws regulating municipality broadband** – Texas Utilities Code, § 54.201 defines the roles that a Texas municipality may utilize as it relates to the deployment of telecommunication facilities and services. The statute does not allow New Braunfels to provide retail broadband services. The law does, however, allow New Braunfels to make investments in broadband infrastructure for its own internal use and for the provision of wholesale telecommunications services within its jurisdiction. Recent FCC rulings in North Carolina and Tennessee may eventually overturn the current Texas statute. New Braunfels also has the ability to petition the FCC to allow it to provide retail services if it desires to do so right away.

3. **Financial sustainability of such an endeavor appears questionable** - Competition in New Braunfels may be significant enough that it would challenge New Braunfels’ ability to gain enough market share to produce the revenues necessary to support capital, operational and debt service expenses of a telecommunications utility. Broadband providers could be expected to lower existing prices and lock in customers to long-term contracts to maintain their existing market share, and impede entry by New Braunfels. In addition, the region has multiple providers delivering business and residential services today; not only by incumbent cable and telephone providers, but New Braunfels has several other regional competitors. It is not clear the market would support another provider.

4. **Funding such an endeavor could be fiscally challenging** - Initial funding of a telecommunications utility would require a significant upfront investment in fiber-optic network, equipment, and professional services to implement the utility. In addition, significant ongoing funding for operations and management would be required to support the utility for many years until revenues were great enough to cover all of the utility’s operating expenses, debt service, and reserves. Telecommunications utilities generally utilize revenue bonds to fund these projects. It is unlikely that the municipal bond market would provide favorable rates and covenants based on the financial projections for a retail provider.
5. **New Braunfels does not maintain the core competencies to become a retail provider** - New Braunfels does not currently have the capabilities to manage a telecommunications utility, which would require significant operations and management resources. These services stray from New Braunfels’ core competencies to the degree that starting a telecommunications utility could potentially result in significant challenges to providing quality retail services commensurate with those currently available from broadband providers.

6. **A retail model could severely limit New Braunfels’ other options, opportunities and partnerships** - As a retail provider, New Braunfels would be forced to compete with broadband providers to gain enough market share to maintain financial sustainability. This would create a hostile environment between New Braunfels and broadband providers that would eliminate meaningful public-private partnerships.
8. Business Model Recommendations

Magellan believes that New Braunfels’ best strategy to quickly bring next-generation broadband to its public and private sectors will be to utilize a combination of business models along with the city's infrastructure strengths. New Braunfels should use strategies from the policy tools, open-access, government services, and public-private partnerships models.

In support of these strategies, New Braunfels should immediately look to implement broadband-friendly public policy tools. These policy tools influence how broadband services are likely to develop in its community. This includes permitting, right of way access, construction, fees, and franchises that regulate the cost of constructing and maintaining broadband infrastructure within its jurisdiction.

A. Broadband-Friendly Public Policy Tools

i) What are Broadband-Friendly Public Policy Tools?

Broadband-friendly public policies are tools that New Braunfels can utilize to encourage broadband implementation and reduce the cost of broadband infrastructure construction. Strategic policies also enable more opportunities for the installation of broadband infrastructure in conjunction with other public and private projects occurring within the city's jurisdiction. Public policy tools are constructed and implemented according to each city's existing ordinances and processes; there is no one single approach to creating effective policies.

ii) Comprehensive Broadband Standards / Joint Trenching Policies

Incorporating broadband infrastructure requirements into the city's land development statutes will allow and encourage broadband construction in conjunction with other capital projects. For example, installation of conduit during projects involving roads, sidewalks, trails, lighting, etc. would be less costly than installing conduit through standalone projects. Since the majority of costs to build broadband infrastructure in New Braunfels are incurred through trenching, boring, and restoration, this strategy can alleviate significant costs by opening the ground once instead of multiple times. New Braunfels, through the use of its Capital Improvement Plan, can determine which projects will best utilize this strategy.

This policy should also be coordinated with New Braunfels Utility and other broadband providers to minimize the need to overbuild and to ensure that providers have an opportunity to place their infrastructure in capital projects as well. Joint trenching policies can facilitate more opportunities to install conduit, fiber, and other infrastructure due to lower costs. Standardization of these agreements across all potential owners of underground infrastructure can be established to ensure all parties are aware of the joint trenching opportunities as they become available.

iii) Creation of an Infrastructure Fund

The city would establish an infrastructure fund set-aside, allocating monies to build broadband infrastructure when opportunities arise, aligned with the capital project schedule. The city would
establish funding based on the capital project schedule and areas where the city could favorably build infrastructure. This would typically be a rolling fund with a reserve or set-aside for unanticipated projects.

iv) GIS and Infrastructure Record Keeping
As part of implementing broadband-friendly public policy measures, the city should require that Geographical Information System (GIS) documentation of all broadband infrastructure installations, upgrades, etc. be maintained and updated as incurred. If the city does not currently have a GIS, Magellan strongly suggests that the city should invest in a GIS based fiber management system to capture and track documentation of its broadband infrastructure. This will allow the city to maintain a clear understanding of locations of the broadband infrastructure such as conduit, vaults, pull boxes, transitions, fiber-optic cable, and other outside plant resources.

v) How Would The City Implement Broadband-Friendly Public Policy Tools?
Developing broadband friendly-public policies requires the City of New Braunfels to evaluate current land use, permitting, construction, and right-of-way policies to determine how these can be tailored to incent development of broadband infrastructure in the city. Below is a list of ways that New Braunfels can encourage broadband development through the adoption of broadband-friendly polices:

- The city should adopt policies that incorporate broadband as a public utility and create a policy framework to promote its deployment in public and private projects as appropriate.
- Draft policies to the city's specific needs and adopt them into local policy, codes, and standards (including policies, dig-once, joint trenching, engineering standards, etc.).
- Incorporate broadband concepts into the city's Capital Improvement Plans (CIP), as appropriate, and make a commitment to fund broadband infrastructure.
- Identify opportunities to install broadband infrastructure in conjunction with public and private construction projects.
- Develop a process so that local Planning and Public Works Departments coordinate with the city to identify projects that could install infrastructure at reduced costs.
- Maintain broadband infrastructure specifications in a city owned GIS based fiber management system, requiring GIS-based drawings and implementation of other means for accurate documentation.
- Develop methods to streamline the broadband permitting processes within public rights-of-way to ensure broadband providers do not face unnecessary obstacles to building infrastructure.
- Evaluate fees levied on broadband providers for constructing broadband infrastructure to ensure they do not discourage broadband investment.

vi) Municipalities That Have Implemented Broadband-Friendly Public Policies?

Example: City of Palm Coast, FL

In 2005, the city created specifications for broadband standards that were adopted by the City Council and became part of the city's engineering standards for all projects. Since 2005, the city has built 30+ miles of underground conduit infrastructure at a
fraction of the cost by incorporating it into the design of water and sewer, road widening, and street lighting projects. The city has also worked with local developers to incorporate these standards into their commercial and residential projects to ensure that any new or retrofit development is outfitted with basic broadband infrastructure.

Example: Santa Cruz County, CA (County Organization)

Santa Cruz County has implemented a number of broadband-friendly public policies that act to streamline, expedite, and reduce the cost of building broadband infrastructure. The County has implemented the following:

1. A master lease agreement allowing the placement of broadband infrastructure on county assets.
2. A new ordinance that more easily allows the installation or upgrades of broadband infrastructure in the county rights-of-way.
3. Conduit specifications for placement of conduit during construction projects (dig once).
4. A broadband master plan to target sections of the county (such as economic vitality areas) for additional broadband infrastructure.

vii) Are There Any Risks?

There is little financial risk in implementing policy tools because they require little upfront funding if managed correctly. In some cases, municipalities have struggled with incorporating broadband into their existing land use policies because they are unfamiliar with how to manage a new “utility” type of asset. This requires the collaboration of multiple departments and the ability of these departments to work together to a common goal. The city should expect that some new business and operational processes would be required as well as changes to existing processes in order for the policies to be effective.

B. Public-Private Strategies

Before embarking on pursuing public-private partnerships (PPP), a municipality should investigate interest from regional providers to see if there is any interest in this type of arrangement. This is an important first step for the city to take in that it will help the city understand what benefits can be achieved working in partnership with existing broadband providers. This step was accomplished during the information gathering stage for the feasibility study by Magellan through discussions with an area provider, GVTC. They expressed interest in further discussions and await specifics from New Braunfels for evaluation. As every public-private partnership is different, the city should consider some key questions before pursuing. The following sections provide guidance on broadband public-private partnerships (PPPs).
i) What is a Broadband Public-Private Partnership?

A broadband public-private partnership ("PPP") is a negotiated contract between a public and private entity to fulfill certain obligations to expand broadband services in a given area. PPPs have gained popularity over recent years as more municipalities employ public broadband and utility infrastructure in conjunction with private broadband providers. PPPs leverage public broadband assets, such as fiber, conduit, poles, facilities with private broadband provider assets and expertise to increase the availability and access to broadband services. Municipalities make targeted investments in their broadband infrastructure and make it available to broadband providers with the goal of enticing providers to service their communities. In this type of model, New Braunfels would be considered an Infrastructure Provider who maintains permanent ownership interest in the broadband infrastructure funded by the city.

ii) Implementing a Broadband PPP?

One method to develop a broadband PPP is to hold competitive negotiations with one or more broadband providers interested in providing service to New Braunfels. Depending on the needs of the city and the provider(s), the partnership may take many forms. In the city's case, it would bring public broadband assets to the negotiating table with private broadband providers to achieve mutually desirable benefits to both the city and the partner(s).

The city could also consider issuing a “Request For Proposal” (RFP) as a vehicle to recruit, evaluate and procure a provider. The RFP approach is used for several reasons. First, in cases where organizations do not want to engage in managing broadband resources, they have used RFP’s to negotiate the wholesale use of their assets while retaining the underlying public ownership. Second, they often want to utilize established procurement vehicles through which they can negotiate “partnerships” with broadband providers. RFP’s are a commonly used as form of procurement; enabling municipalities to follow procurement and negotiation guidelines that are familiar to them. Third, the organizations often want to ensure their procurements are open and non-discriminatory to qualified broadband providers.

The RFP would invite broadband providers to submit information detailing how they would utilize the city's broadband infrastructure to achieve the objectives laid out in the RFP. RFP's are generally not solely evaluated on price as the revenues and costs within the project negotiated between the parties are a constantly changing due to multiple factors and many times are not determined until well into the negotiation. Rather, they are executed on the total value derived from the project, in terms of revenue, economic development, new jobs, increases in the tax base, pricing for services, quality of services, and other "non-financial" or "off balance sheet" benefits.

iii) Important Criteria for Broadband PPPs?

As the city begins its discussions with potential broadband providers, it is important to consider the following questions to ensure it is making informed decisions about moving forward:

Q1: Should the city negotiate with one or multiple broadband providers?

The decision to form a Broadband PPP with a single or multiple providers will determine how much power the city maintains at the negotiating table with potential partners and how much of the city's
goals are agreed to by the partner. In a single provider PPP, the provider will generally be incented by the opportunity to capture a large market through use of the city’s broadband assets and do so with no competition from other providers for those assets. In a multi-provider PPP, multiple providers will have access to those assets, reducing the incentives a single provider would enjoy. However, a multi-provider PPP would protect the city from a lack of performance or a default of a single provider, which may render the PPP ineffective.

**Q2: What is the range of potential partners available to the city?**

The city should make the RFP open and non-discriminatory, allowing all qualified providers the opportunity to submit their proposal. This will be somewhat determined by the city’s legal ability to negotiate with one provider without a public procurement. In many public-private partnerships, a public procurement has been used to ensure the municipality enforces non-discrimination requirements as a public organization. The RFP may be inclusive of New Braunfels’ current broadband providers, including incumbents, cable companies, and other competitive providers. The city may also consider the geographic scope of potential partners. Limiting the scope of qualified applicants to only those serving New Braunfels today could limit the city’s range of proposals. The city should consider expanding this scope to cover the greater US telecom/broadband market to include potential partners that may deliver other new and innovative broadband solutions to the region.

**Q3: What incentives can the city offer potential partners?**

The city can make its broadband assets available to one or more partners on a cost basis (with minimal markup over cost) to incent providers to accelerate broadband deployments in New Braunfels. These incentives may also help providers reduce costs to citizens, businesses, and community anchors. The city should clearly identify the assets that it will employ in the partnership, the value of these assets and the consideration given to partners for incentivized use of the assets. Doing so will ensure the city and partner(s) clearly document the exchange of value between the partners. Many municipalities have used economic development agreements to memorialize these exchanges.

**Q4: What conditions could the city ask of broadband providers?**

The city should clearly define its expectations in the partnership(s). These expectations may include offering specific types of services in target areas, guaranteeing performance and quality of services and offering low-cost “lifeline” packages for economically disadvantaged residents and businesses. The city should identify which components are required and non-negotiable in the partnership versus those components that may be negotiated. For New Braunfels, some of the critical “ask” terms for the city should include:

- Providing free or low-cost internet service to public organizations
- Establishing a non-compete agreement for connectivity services to public organizations, the city desires to expand its services to schools, healthcare and other public organizations directly;
Meeting price targets for specific tiers of service to residential and commercial customers;
Providing Gigabit internet services to businesses and potentially residents;
Co-Marketing programs that the region’s economic development organizations can utilize to recruit new business and promote New Braunfels as a connected region;
Enabling low-cost “lifeline” broadband services for economically disadvantaged residents;
Equipping business parks, community redevelopment areas, and other designated places with broadband services;
Guaranteeing performance, availability, and reliability of services provided under the PPP; and
Inclusion of an equity/penalty clause should the provider fail to meet the agreed upon terms.

Q5: How could the partnership be managed?

The city should anticipate the need for ongoing management of a Broadband PPP. This will require the city to establish resources such as administrative, management, and operational personnel or arrange for these tasks to be outsourced to a third party. The primary management functions include measuring the progress and performance of the partner(s), overseeing the broadband assets employed in the partnership, and managing ongoing operational functions such as new broadband build outs.

iv) How to Achieve the Most Favorable Outcome

Outcomes are highly dependent on the city’s goals in the project, value of the broadband assets, and desire to maintain control over how the broadband provider utilizes the assets. To achieve the most favorable outcomes, the city should strive to accomplish several key items in negotiating a PPP with the potential partner (or others):

1. Treat broadband providers as stakeholders in the community
   a. Consider their capital requirements
   b. Remember that providers are for-profit, and their decision-making will be based on achieving internally required returns
   c. Understand that their payback requirements are shorter than in the municipal world

2. Identify the target areas for broadband expansion in the PPP
   a. Identify the boundaries
   b. Pinpoint the city’s broadband assets for use in these target areas
   c. Define the services that are expected to be provided by the broadband provider
d. Enable the provider to deploy services as quickly as possible by minimizing the following obstacles:
   i. Permitting timeframes
   ii. Requiring single versus bulk/blanket permits for their projects
   iii. Strict construction requirements for placement of conduit, fiber and facilities

3. Minimize one-time ongoing fees to keep prices for broadband services low in the local market
   a. Normalize, reduce or waive permitting fees for construction projects
   b. Minimize leasing fees for the city's broadband assets such as fiber and conduit
   c. Allow for lower cost construction methods where possible (in conjunction with item 1c)

4. Clearly define the consideration given and received in the project with the broadband provider
   a. Determine the value given by the city to the provider in the PPP
   b. Determine the value generated by the provider to the community as a result of the PPP
   c. Define the timeframe for the community to receive the benefits of the PPP

5. Define how the PPP will be managed and governed
   a. How will the parties conduct business with one another and maintain alignment
   b. How do the parties deal with shortfalls if either party isn’t able to meet the requirements in the timeframe desired
   c. How is performance of the PPP and the partners measured?

Example: Google Fiber in Kansas City, Provo, and Austin
These projects utilize a form of public-private partnership whereby each municipality developed agreements for the use of municipal broadband infrastructure and/or policy incentives to attract the provider to the city.

Example: Axcess Ontario, NY
Axcess Ontario builds the fiber infrastructure to supply/lease telecom technology, which enables carriers to provide service to their customers. Axcess Ontario collaborates with broadband providers such as Verizon Wireless and Time Warner Telecom to leverage its fiber-optic network to bring more broadband services to the community.

v) What are the Risks?
Broadband PPPs are relatively new to local governments but their popularity is growing because they align public organizations and private providers, leveraging each other’s core strengths. In most cases, PPPs alleviate municipalities from the requirements to provide retail or wholesale broadband services and allow them to employ their broadband infrastructure and policies with providers who take on these responsibilities.
Fundamental alignment between the public and private partner(s) is important for successful PPPs. Municipal goals must be balanced with private sector goals and strategies. These goals and strategies must fulfill each party’s critical needs and must be forged early in the process. The identification and selection of the right partner(s) is paramount to success in the project. Execution risks can be high for municipalities that do not have a clear understanding of the true needs of their communities or those of broadband providers.

C. Broadband Infrastructure

i) What Infrastructure Would The City Build?
The city would make key strategic investments in underground conduit and fiber optics throughout the key business corridors and areas of New Braunfels. The city in turn would offer these assets to providers to use to deliver high-speed broadband services to the businesses, community anchors and potentially residents throughout the service area. These directed investments would allow retail providers to use the infrastructure to reach more customers without the need for a business case to obtain capital to build the costly fiber infrastructure. The city would maintain responsibility for this function.

ii) Why Would The City Build This Network?
Many municipalities find the investment in infrastructure to be a compelling option for them as it allows local input and oversight into the deployment of broadband services as well as the ownership of these key community assets. The city’s involvement can also be used to keep prices low for potential users, while at the same time providing for the advanced capabilities enabled by fiber optic cable. It also allows them to continue the buildout of their fiber-optic networks for municipal and community purposes by owning the underlying physical fiber network. These investments in infrastructure are long-lived assets, and will continue to bring value to the region for decades to come.

By making key investments in fiber infrastructure throughout New Braunfels, the city can consider these areas as “fiber ready.” This can be a significant game changer for economic development, as potential businesses would have the ability to know it can locate its business within a “fiber zone”, and that scalable fiber services are readily available. Through investment in a network infrastructure, the city could potentially provide a new source of next-generation broadband access to service providers while maintaining neutrality and non-discrimination while “staying out of the business” of providing retail services. The city’s only customers are the service providers that utilize the municipal network to reach businesses, anchors and potentially residents in New Braunfels.

iii) C. How Would The City Build This Network?
Becoming an infrastructure provider would require the city to create an appropriate organizational and operational structure to manage the broadband infrastructure assets. Some considerations for the city to evaluate in implementing this network include the additional operations and management responsibilities required to maintain the network, recruitment, negotiation and financing requirements to build the network.
iv) **Broadband Infrastructure Investment Concept**

The city’s investment in broadband infrastructure could be utilized as an additional asset that can be brought to the table in a Public-Private-Partnership. This infrastructure, which would be owned by the city, would be utilized by the partnering provider as the distribution/access network used to connect commercial buildings and users within the fiber zones identified in this Study. Availability of these assets removes the barrier of entry for providers that would like to enter the market or expand, yet have constraints of capital or difficulty making the business case. In addition, the entire region can make use of the city’s network providing local ownership and decision-making as it relates to telecommunications, and in the support of deploying Smart Community technologies that can drive innovation and efficiency.

In many cases, providers operating in and out of New Braunfels have to justify the cost to build fiber infrastructure to connect potential subscribers. This process involves the development of a business case and a reasonable payback, which for many telecom entities is 18 to 36 months, a generally short timeframe. In areas such as downtown New Braunfels, these paybacks can be difficult to obtain especially when underground placement is required if aerial deployment is not an option, and the cost per foot for construction/restoration can be very high. The City of New Braunfels can strategically build a fiber network to serve these fiber deployment zones and can utilize local funding, long-term financing options and can include the off-balance sheet benefits such as job growth, business retention, and increased quality of life to develop its business case and return on investment.

A city owned network could also be utilized to expand fiber service to key anchor institutions in the region for intergovernmental collaboration purposes, increased local access for Smart Community initiatives or to access telecommunications providers who may be interconnected to the network. Not only would this fulfill additional connectivity needs, but would likely do so at a reduced cost than can otherwise be obtained in the local market.

The city’s ownership in this long-term asset provides the local region with ownership of the broadband infrastructure that will drive community and economic development for decades to come. The city and its local government partners will have the ability to make key decisions on how and where this asset is expanded, providing local control and decision making that is otherwise absent from the environment today. This network would allow the city to aggregate local demand for telecommunications services across a common network, paid for and owned by the communities it serves.

The existing fiber map [Figure 8-1] shows that New Braunfels is well positioned to address the fiber deployment zones mapped below. These include the major business areas of the city and encompass the Downtown Core [Figure 8-2], North [Figure 8-3] and South [Figure 8-4] Business Zones, the Airport Park [Figure 8-5], and the future Business Park area [Figure 8-6]. Connectivity between these zones would provide additional fiber connectivity options for those businesses located in these key corridors. From an Economic Development perspective, these identified zones could be classified as “Fiber Ready” areas where direct fiber services are readily available. The implementation of this concept takes the guess work out of trying to figure out whether or not fiber service is available in a specific area of the region, as well as the aid to construction costs which are normally passed along to the business
requesting service. Businesses looking to locate in the New Braunfels region can be directed to these fiber zones with assurance of high-speed scalable broadband connectivity being readily available.

Figure 8-1: City of New Braunfels, New Braunfels Utility, and New Braunfels ISD Existing Fiber Routes
Figure 8-2: Downtown Core, Zone 1

Figure 8-3: Map of North Business Area, Zone 2
Figure 8-4: Map of South Business Area, Zone 3

Figure 8-5: Map of Airport Park, Zone 4
Figure 8-6: Map of Future Business Park, Zone 6
The following maps show the overall deployment areas [Figure 8-7] and the overall deployment areas overlaid against the existing fiber network [Figure 8-8].

Figure 8-7: Map of Overall Deployment

Figure 8-8: Overlay of Existing Fiber Routes to Deployment Areas
Final costs will depend on the area to be served. To determine the geographic scope of the network, the city would identify key business corridors and areas that are “prime” for broadband deployment as indicated above. Most municipal networks are built into commercial areas first because this is where the need for fiber based broadband services is highest and tend to have the greatest impact. These networks also generate positive economic development benefits in a short amount of time by enabling local businesses to access next-generation broadband at affordable rates. Magellan would suggest using a phased approach that first brings fiber-optic broadband to New Braunfels’ business corridors.

Figure 8-9: New Braunfels Network Deployment Phasing Plan

The preliminary designs of the business fiber zones identified include 100% new construction in all areas with varied combination of aerial and underground placement. The outlined costs are conservative worst-case scenario and do not include the use of any existing fiber routes or conduit. The city should be able to reduce these overall costs by aligning conduit and fiber deployment with planned underground capital projects or using existing fiber routes and pole lines. In addition, current city and New Braunfels Utility fiber assets have not been included in the overall design, but could provide additional cost-savings if incorporated.

Figure 8-10: New Braunfels Business Corridor Build-Out Costs

<table>
<thead>
<tr>
<th>Zone</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<td>Area</td>
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<td></td>
<td></td>
<td>Overall</td>
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<td>Deployment</td>
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<td>North Business Area</td>
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<td>150</td>
<td>125</td>
<td>6</td>
<td>96</td>
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<td>Overall Deployment</td>
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<tr>
<td>Fiber-Optic Network Costs</td>
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<td>$950,016</td>
<td>$222,977</td>
<td>$825,282</td>
<td>$3,414,580</td>
</tr>
</tbody>
</table>
While the costs above provide the necessary basis to build a distribution/access network throughout these identified areas, these costs do not include the fiber drops to each building. A fiber drop is the last-mile connection that connects the premise to be served to the greater fiber network and is essential to completing the fiber path to the subscriber. Typical drop costs range from $1,500 to $5,000 per premise or building and are highly attributed to underground versus aerial placement and the overall distance of the drop. The city should plan to include funding to build and own the drop as this gives long-term stability to the network and underlying ownership of the assets. Drop costs are one-time capital cost, however are not realized until a subscriber or property owner is ready to take service.

v) Existing Government Owned Networks

If the city decides on making key investments in broadband infrastructure and takes on the management and operational responsibility for this network, it would make sense to aggregate any locally government owned networks in the region under the City of New Braunfels' oversight. This would allow the city to make use of existing fiber, conduit and other assets without having to overbuild exiting infrastructure. In addition, it could allow the city to manage and market these assets. Economies of scale could be leveraged for the operations and maintenance of the assets, while continuing to provide the New Braunfels Utility and New Braunfels ISD with access just as is available today.

Currently the City of New Braunfels maintains its own fiber network shared with New Braunfels Utility and the New Braunfels ISD which is used to support the various organizations internal operations. In each of these cases, the city could manage and operate these networks while allocating the necessary fiber strands to support the various partners currently making use of these networks. In addition, the city would include these routes into a Fiber Management System for asset tracking and mapping purposes.

The city would be responsible for determining the Operational and Management (O&M) costs for management of all fiber throughout the region, and allocating back a pro rata share to New Braunfels Utility and the New Braunfels ISD for O&M charges, which primarily would be paid to third-party firms. O&M is operations and maintenance, and includes repairs, restoration, documentation and preventative maintenance of the infrastructure. The city could possibly include a provision during the PPP negotiations, passing this requirement onto the partner.

vi) How Will New Braunfels Receive a Return on Its Investment?

The city would have many opportunities to realize a return on its investment in funding and constructing a fiber network throughout the New Braunfels region. These opportunities include a potential revenue share through the successful negotiation of a public-private-partnership, lease of dark fiber and the off balance sheet returns such as business growth and retention, business recruitment and an increase in the quality of life for its constituents. While several of these stated opportunities offer direct financial contributions to the city’s return on investment, it is difficult to quantify the off balance sheet returns. In addition, it's important to remember that this investment is being made into a long-term asset, which will continue to drive efficiency and innovation throughout the region for many years to come. These assets will remain on the city's books, as ownership will be retained by the City of New Braunfels.
A successful negotiation of a public-private-partnership would include a revenue share to the city of the gross revenue generated from the city's broadband assets. A revenue share of 5% - 10% of gross revenue could be expected and would generate a consistent annual revenue stream to the city. This revenue share would be paid by the private partner through subscriber fees collected for the provision of broadband services. Negotiation of the revenue share is a balancing act as this is typically a pass-through of fees collected from local subscribers. Therefore, the higher the revenue share, the higher the fees passed onto the subscribers through service fees. The lower the revenue share, the lower the fees. It will be important for the city to understand the level and timeframe of payback it's willing to consider and should adjust the revenue share accordingly.

The city could also utilize the broadband infrastructure to lease dark fiber to community anchors or other providers that may require capacity in the region. The city would establish dark fiber lease rates and would make these available to users that would require this type of service. In addition, the city could develop IRU rates that provide discounted lease rates for long-term prepaid lease agreements.

Finally, investments in broadband infrastructure will allow the city to make strategic decisions in how the area is served and offers yet another tool in the city's toolbox for growing the business environment. While it is often difficult to quantify the financial impact to economic development activities, there is a clear correlation between bringing new companies and jobs to the region and the overall financial viability of the area.

Estimates place the build out of a feeder/distribution fiber network in all areas identified at approximately $3.5 million. This network could be built in whole or in a phased approach depending on funding availability. This network would provide fiber access to any premise or subscriber requesting service within the service areas defined. The city would incur additional construction costs above the initial $3.5 million to connect the various buildings to the network. To determine the city's return on its investment, it's necessary to outline the parameters that are included in developing the business case. The parameters that directly impact ROI include the capital investment amount, average revenue per user (ARPU), revenue share, rate of return, payback term (10, 15, 20 and 30 year), and the cost of administration and overhead. The sensitivity of the return is directly impacted by the revenue share, rate of return and payback term.

Through analysis of the full deployment throughout the identified zones, we're able to understand the number of subscribers that would have to take service from the network to provide a return. These numbers will have to be vetted through the negotiation process and the potential partner will need to understand the assumptions the city has made. As one begins to break down the various areas that have been identified as broadband deployment zones and run individual financial analysis of each zone, it becomes clear that some zones could be more likely to perform as capital costs may be lower than others, and may have greater business density.
Figure 8-11: Financial Analysis of Deployment (10% Revenue Share, 3% Rate of Return)

<table>
<thead>
<tr>
<th>Assumptions</th>
<th>Timeframe</th>
<th>10 Year</th>
<th>15 Year</th>
<th>20 Year</th>
<th>30 Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARPU: $150 per month</td>
<td>Annual Revenue to City</td>
<td>$505,000</td>
<td>$388,333</td>
<td>$330,000</td>
<td>$271,667</td>
</tr>
<tr>
<td>Revenue Share: 10%</td>
<td>Average Revenue per Sub</td>
<td>$180</td>
<td>$180</td>
<td>$180</td>
<td>$180</td>
</tr>
<tr>
<td>Capital Investment: $3.5M</td>
<td>Average Annual Customers</td>
<td>2,806</td>
<td>2,157</td>
<td>1,833</td>
<td>1,509</td>
</tr>
<tr>
<td>Rate of Return: 3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual OPEX: $50,000</td>
<td>Total Return</td>
<td>$5.05M</td>
<td>$5.83M</td>
<td>$6.6M</td>
<td>$8.15M</td>
</tr>
</tbody>
</table>

Figure 8-12: Financial Analysis of Deployment (10% Revenue Share, 0% Rate of Return)

<table>
<thead>
<tr>
<th>Assumptions</th>
<th>Timeframe</th>
<th>10 Year</th>
<th>15 Year</th>
<th>20 Year</th>
<th>30 Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARPU: $150 per month</td>
<td>Annual Revenue to City</td>
<td>$400,000</td>
<td>$283,333</td>
<td>$225,000</td>
<td>$166,667</td>
</tr>
<tr>
<td>Revenue Share: 10%</td>
<td>Average Revenue per Sub</td>
<td>$180</td>
<td>$180</td>
<td>$180</td>
<td>$180</td>
</tr>
<tr>
<td>Capital Investment: $3.5M</td>
<td>Average Annual Customers</td>
<td>2,222</td>
<td>1,574</td>
<td>1,250</td>
<td>926</td>
</tr>
<tr>
<td>Rate of Return: 0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual OPEX: $50,000</td>
<td>Total Return</td>
<td>$4M</td>
<td>$4.25M</td>
<td>$4.5M</td>
<td>$5M</td>
</tr>
</tbody>
</table>

The analyses provided in Figure 8-11 and Figure 8-12 show a Rate of Return of 3% and 0% respectively. The overall annual customer requirements and total return numbers greatly differ between both projections. The city should use these guidelines as a basis for negotiating a final agreement with a private partner, but should also realize that there are a number of additional ways to monetize the network through the leasing of dark fiber, IRUs and through other off-balance sheet returns dealing with economic growth, which are both difficult to quantify at this point.

* Total returns listed above are non-inflation adjusted and should be used as general guidelines in this Broadband Feasibility Study.

vii) What are the Risks?

The risks of investing in the proposed fiber optic network by the city are minimal and tempered because the city will retain long-term ownership of the asset. While it is recommended that the city continue to make key strategic investments in underground infrastructure when possible, it does not recommend full build out as the plan indicates until a successful public-private-partnership agreement has been reached. In many ways, this is not a “build it and they will come” approach, but leans heavily on the private partner to know and understand the local market and their ability to execute their side of the
partnership. With this being said, the city should ensure it conducts the proper amount of due diligence on all responding providers to ensure it adequately vets its potential partners.

It is always possible for the local incumbents to drop their current prices and to make an attempt at locking their current customers into long-term contracts. The fact is that their current service offerings will still be delivered over legacy copper infrastructure and service levels will not compete with the new fiber based offerings. It is very unlikely that current incumbents will overbuild their current infrastructure and therefore will be unable to compete over the long-term.
9. Regulatory Analysis

Magellan Advisors has reviewed the regulatory and policy environment in Texas pertaining to municipal broadband. Information was gained from communication with the Texas Municipal League staff and Public Utility Commission of Texas staff (Texas PUC), review of the Texas Statutes and Texas PUC filing and certification requirements, as well as through Magellan’s own research and knowledge. Broadband facilities and services have been very lightly regulated at the federal (Federal Communications Commission) or state (Texas PUC) levels. The FCC in its application of federal law had generally treated broadband internet access services as unregulated services and subjected them to fewer regulations than cable TV or telecommunications services. However, the FCC recently changed its approach to broadband services. Specifically, prior to this year the FCC had employed light-handed regulatory practices for internet access under its “Title I”, Information Services authority. By its “Net Neutrality” order in February 2015, the FCC changed from viewing internet access (and other services) as Title I “Information Services”, and reclassified those services to be regulated as “Title II” services.

At the federal level, this reclassification permits the FCC to use its full array of public utility-style regulatory practices, but very significantly, the FCC has indicated it will “forbear” from applying these practices, and in fact, the FCC has very carefully avoided calling internet access a “telecommunications service”. FCC regulation of internet services is intended by the FCC to remain light-handed through this “forbearance”, with regulatory scrutiny focused mainly to ensure greater transparency, reasonable network management practices, authority to review interconnection practices, and to ban three practices: blocking access to legal content; throttling on the basis of content; or paid prioritization. Therefore the decision to reclassify internet services as “Title II” does not present concerns from that perspective, but this FCC decision could have consequences for municipal provision of broadband services, due to existing Texas state statutes.

The Texas Legislature enacted the “Public Utility Regulatory Act of 1995” (“PUR 95”), which included Section 54.202 “Prohibited Municipal Services”, as follows:

1. A municipality or municipal electric system may not offer for sale to the public:
   a. a service for which a certificate of convenience and necessity, a certificate of operating authority, or a service provider certificate of operating authority is required; or
   b. a non-switched telecommunications service used to connect a customer’s premises with:
      i. another customer’s premises within the exchange; or
      ii. a long distance provider that serves the exchange.

[11] This discussion and analysis does not constitute a legal opinion and should not be construed as such.

2. Subsection (a) applies to a service offered either directly or indirectly through a telecommunications provider.

Opponents of this legislation asked the FCC to use its authority to preempt its effectiveness. Preemption was sought under 47 U.S.C. Section 253 (a) which relates to “telecommunications services”, not “information services”. The FCC declined to preempt the effectiveness of the statute, and this decision was upheld on appeal.[13] The statute did not and does not address “information services”, so while the FCC maintained its classification of internet services as “Title I” information services, municipal provision of internet access services was not impaired by PURA 95.[14]

In 1999 the Texas Legislature enacted Section 54.2025, “Lease of Fiber Optic Cable Facilities”, as follows:

Nothing in this subchapter [Subchapter E, Municipalities] shall prevent a municipality, or a municipal electric system that is a member of a municipal power agency formed under Chapter 163 by adoption of a concurrent resolution by the participating municipalities on or before August 1, 1975, from leasing any of the excess capacity of its fiber optic cable facilities (dark fiber), so long as the rental of that fiber facilities is done on a nondiscriminatory, non-preferential basis.

Therefore, it appears that the City of New Braunfels would be able to provide broadband infrastructure such as dark fiber, but the FCC's recent “Net Neutrality” decision may add an element of risk to the ability of the city to provide internet access facilities, even though the Texas PUC does not regulate provision of broadband services by municipalities.[15] The FCC has very carefully not called internet access a “telecommunications service” even though it has classified it as a Title II service. The current PUC staff interpretation is that since internet access has not been definitively labeled a “telecommunications service” by the FCC, this would not trigger the application of the “Prohibited Municipal Services” of Section 54.202.

Furthermore, the FCC has taken recent action to eliminate state barriers to the municipal provision of broadband services, and this action was taken at the same open meeting in which the FCC made its


[14] The preemption filings before the FCC and subsequent court action pertaining to Section 54.202, and the distinctions between Title I “Information Services” and Title II “Telecommunications Services” are analyzed in detail in the Reply Comments of the Texas Cities Coalition to the Comments of the Advanced Communications Law and Policy Institute at New York Law School, filed before the FCC in the Matter of Petitions Pursuant to Section 706 of the Telecommunications Act of 1996 for Removal of State Barriers to Broadband Investment and Competition; WCB Docket No. 14-115 (Wilson, North Carolina); and, WCB Docket No. 14-116 (Electric Power Board of Chattanooga, Tennessee); September 29, 2014. New Braunfels is a member of the “Texas Cities Coalition” that filed the comments.

[15] Under the current structure, a municipality need not even apply for PUC certification to provide broadband internet services, however, provision of voice telephone service is prohibited.
“Net Neutrality” decision. In its decision on the petitions of the City of Wilson, North Carolina and the Electric Power Board of Chattanooga, Tennessee, the FCC preempted the effect of state laws that restrict municipal provision of broadband services.\[16\] This decision is fact-specific to only the two cities, but it is clear that the FCC would make similar rulings for other cities on similar circumstances. The City of New Braunfels on its own, or concert with other cities in Texas has the opportunity to similarly petition the FCC for preemption of state laws that constitute barriers to municipal provision of broadband services in the best interests of the city's own citizens and residents.

\[16\] Memorandum Opinion and Order; In the Matter of Petitions Pursuant to Section 706 of the Telecommunications Act of 1996 for Removal of State Barriers to Broadband Investment and Competition; WCB Docket No. 14-115 (Wilson, North Carolina); and, WCB Docket No. 14-116 (Electric Power Board of Chattanooga, Tennessee); FCC 15-25; Adopted February 26, 2015 and Released March 12, 2015.
10. Recommendations and Next Steps

The City of New Braunfels and regional business leaders recognize broadband infrastructure as an important part of the region’s economic development strategy in retaining existing businesses and attracting new companies to the area. The market is currently served by legacy copper networks with the exception of minimal fiber Gigabit-capable Passive Optical Networks (GPON) and dedicated fiber connections in some cases. Current dedicated fiber connections are available but very expensive, many times due to the aid to construction charges. This alone does not allow the City or other economic development organizations in the region to respond to prospective businesses or site locators with absolute fiber offerings or costs, which can lead to the area being disqualified early in the site investigation process.

The city has an opportunity to be a leader in the New Braunfels region by immediately developing broadband-friendly policies and making key investments in broadband infrastructure that can be utilized by other public agencies and by private providers to serve the market. This Study had identified the main business areas and corridors in the region and has identified over 500 commercial properties that could be served by fiber optics through the city’s initiative. These areas and the commercial properties could be considered on net, allowing direct, immediate access to fiber based telecommunications services, which is otherwise absent in the region today.

In conjunction with policies and infrastructure investments, the City of New Braunfels should take the following steps to create a public-private partnership:

1. Investigate/finalize potential sources to fund the necessary infrastructure.
2. Develop an RFP outlining the city and region’s vision and goals for bringing high-speed broadband infrastructure to the New Braunfels region and defining the terms and conditions of the partnership.
3. Release RFP for a 30-60 day period in a public procurement process.
4. Evaluate, short-list, interview and select a partner to begin negotiations.
5. Begin to negotiate and work toward development of a Memorandum of Understanding (MOU) and a final definitive agreement to formalize the partnership.
6. Develop a business plan for the City of New Braunfels to become an infrastructure provider of fiber-optic infrastructure in the New Braunfels region.
### 11. Appendix A – Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>3G – Third Generation</td>
<td>The third generation of mobile broadband technology, used by smart phones, tablets, and other mobile devices to access the web.</td>
</tr>
<tr>
<td>4G – Fourth Generation</td>
<td>The fourth generation of mobile broadband technology, used by smart phones, tablets, and other mobile devices to access the web.</td>
</tr>
<tr>
<td>ADSL – Asymmetric Digital Subscriber Line</td>
<td>DSL service with a larger portion of the capacity devoted to downstream communications, less to upstream. Typically thought of as a residential service.</td>
</tr>
<tr>
<td>ADSS – All-Dielectric Self-Supporting</td>
<td>A type of optical fiber cable that contains no conductive metal elements.</td>
</tr>
<tr>
<td>AMR/AMI – Automatic Meter Reading/Advanced Metering Infrastructure</td>
<td>Electrical meters that measure more than simple consumption and an associated communication network to report the measurements.</td>
</tr>
<tr>
<td>ATM – Asynchronous Transfer Mode</td>
<td>A data service offering that can be used for interconnection of customer’s LAN. ATM provides service from 1 Mbps to 145 Mbps utilizing Cell Relay Packets.</td>
</tr>
<tr>
<td>Bandwidth</td>
<td>The amount of data transmitted in a given amount of time; usually measured in bits per second, kilobits per second (kbps), and Megabits per second (Mbps).</td>
</tr>
<tr>
<td>Bit</td>
<td>A single unit of data, either a one or a zero. In the world of broadband, bits are used to refer to the amount of transmitted data. A kilobit (Kb) is approximately 1,000 bits. A Megabit (Mb) is approximately 1,000,000 bits. There are 8 bits in a byte (which is the unit used to measure storage space), therefore a 1 Mbps connection takes about 8 seconds to transfer 1 megabyte of data (about the size of a typical digital camera photo).</td>
</tr>
<tr>
<td>BPL – Broadband over Powerline</td>
<td>A technology that provides broadband service over existing electrical power lines.</td>
</tr>
<tr>
<td>BPON – Broadband Passive Optical Network</td>
<td>BPON is a point-to-multipoint fiber-lean architecture network system which uses passive splitters to deliver signals to multiple users. Instead of running a separate strand of fiber from the CO to every customer, BPON uses a single strand of fiber to serve up to 32 subscribers.</td>
</tr>
<tr>
<td>Term</td>
<td>Description</td>
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<td>---------------------</td>
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</tr>
<tr>
<td><strong>Broadband</strong></td>
<td>A descriptive term for evolving digital technologies that provide consumers with integrated access to voice, high-speed data service, video-demand services, and interactive delivery services (e.g. DSL, Cable internet).</td>
</tr>
<tr>
<td><strong>CAD – Computer Aided Design</strong></td>
<td>The use of computer systems to assist in the creation, modification, analysis, or optimization of a design.</td>
</tr>
<tr>
<td><strong>CAI – Community Anchor Institutions</strong></td>
<td>The National Telecommunications and Information Administration defined CAIs in its SBDD program as “Schools, libraries, medical and healthcare providers, public safety entities, community colleges and other institutions of higher education, and other community support organizations and entities”. Universities, colleges, community colleges, K-12 schools, libraries, health care facilities, social service providers, public safety entities, government and municipal offices are all community anchor institutions.</td>
</tr>
<tr>
<td><strong>CAP – Competitive Access Provider</strong></td>
<td>(or “Bypass Carrier”) A Company that provides network links between the customer and the Inter-Exchange Carrier or even directly to the internet Service Provider. CAPs operate private networks independent of Local Exchange Carriers.</td>
</tr>
<tr>
<td><strong>Cellular</strong></td>
<td>A mobile communications system that uses a combination of radio transmission and conventional telephone switching to permit telephone communications to and from mobile users within a specified area.</td>
</tr>
<tr>
<td><strong>CLEC – Competitive Local Exchange Carrier</strong></td>
<td>Wireline service provider that is authorized under state and Federal rules to compete with ILECs to provide local telephone service. CLECs provide telephone services in one of three ways or a combination thereof: 1) by building or rebuilding telecommunications facilities of their own, 2) by leasing capacity from another local telephone company (typically an ILEC) and reselling it, and 3) by leasing discrete parts of the ILEC network referred to as UNEs.</td>
</tr>
<tr>
<td><strong>CO – Central Office</strong></td>
<td>A circuit switch where the phone lines in a geographical area come together, usually housed in a small building.</td>
</tr>
<tr>
<td><strong>Coaxial Cable</strong></td>
<td>A type of cable that can carry large amounts of bandwidth over long distances. Cable TV and cable modem service both utilize this technology.</td>
</tr>
<tr>
<td><strong>CPE – Customer Premise Equipment</strong></td>
<td>Any terminal and associated equipment located at a subscriber's premises and connected with a carrier's telecommunication channel at the demarcation point (&quot;demarc&quot;).</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>CWDM – Coarse Wavelength Division Multiplexing</strong></td>
<td>A technology similar to DWDM only utilizing less wavelengths in a more customer-facing application whereby less bandwidth is required per fiber.</td>
</tr>
<tr>
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</tr>
<tr>
<td><strong>Demarcation Point (&quot;demarc&quot;)</strong></td>
<td>The point at which the public switched telephone network ends and connects with the customer's on-premises wiring.</td>
</tr>
<tr>
<td><strong>Dial-Up</strong></td>
<td>A technology that provides customers with access to the Internet over an existing telephone line.</td>
</tr>
<tr>
<td><strong>DLEC – Data Local Exchange Carrier</strong></td>
<td>DLECs deliver high-speed access to the internet, not voice. Examples of DLECs include Covad, Northpoint and Rhythms.</td>
</tr>
<tr>
<td><strong>Downstream</strong></td>
<td>Data flowing from the internet to a computer (Surfing the net, getting E-mail, downloading a file).</td>
</tr>
<tr>
<td><strong>DSL – Digital Subscriber Line</strong></td>
<td>The use of a copper telephone line to deliver “always on” broadband internet service.</td>
</tr>
<tr>
<td><strong>DSLAM – Digital Subscriber Line Access Multiplier</strong></td>
<td>A piece of technology installed at a telephone company's Central Office (CO) and connects the carrier to the subscriber loop (and ultimately the customer's PC).</td>
</tr>
<tr>
<td><strong>DWDM – Dense Wavelength Division Multiplexing</strong></td>
<td>An optical technology used to increase bandwidth over existing fiber-optic networks. DWDM works by combining and transmitting multiple signals simultaneously at different wavelengths on the same fiber. In effect, one fiber is transformed into multiple virtual fibers.</td>
</tr>
<tr>
<td><strong>E-Rate</strong></td>
<td>A Federal program that provides subsidy for voice and data circuits as well as internal network connections to qualified schools and libraries. The subsidy is based on a percentage designated by the FCC.</td>
</tr>
<tr>
<td><strong>EON – Ethernet Optical Network</strong></td>
<td>The use of Ethernet LAN packets running over a fiber network.</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
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<tr>
<td>EvDO – Evolution Data Only</td>
<td>EvDO is a wireless technology that provides data connections that are 10 times as fast as a traditional modem. This has been overtaken by 4G LTE.</td>
</tr>
<tr>
<td>FCC – Federal Communications Commission</td>
<td>A Federal regulatory agency that is responsible for regulating interstate and international communications by radio, television, wire, satellite and cable in all 50 states, the District of Rock Falls, and U.S. territories.</td>
</tr>
<tr>
<td>FDH – Fiber Distribution Hub</td>
<td>A connection and distribution point for optical fiber cables.</td>
</tr>
<tr>
<td>FTTN – Fiber to the Neighborhood</td>
<td>A hybrid network architecture involving optical fiber from the carrier network, terminating in a neighborhood cabinet with converts the signal from optical to electrical.</td>
</tr>
<tr>
<td>FTTP – Fiber to the premise (or FTTB – Fiber to the building)</td>
<td>A fiber-optic system that connects directly from the carrier network to the user premises.</td>
</tr>
<tr>
<td>GIS – Geographic Information Systems</td>
<td>A system designed to capture, store, manipulate, analyze, manage, and present all types of geographical data.</td>
</tr>
<tr>
<td>GPON– Gigabit-Capable Passive Optical Network</td>
<td>Similar to BPON, GPON allows for greater bandwidth through the use of a faster approach (up to 2.5 Gbps in current products) than BPON.</td>
</tr>
<tr>
<td>GPS – Global Positioning System</td>
<td>A space-based satellite navigation system that provides location and time information in all weather conditions, anywhere on or near the Earth where there is an unobstructed line of sight to four or more GPS satellites.</td>
</tr>
<tr>
<td>GSM – Global System for Mobile Communications</td>
<td>This is the current radio/telephone standard developed in Europe and implemented globally except in Japan and South Korea.</td>
</tr>
<tr>
<td>HD – High Definition (Video)</td>
<td>Video of substantially higher resolution than standard definition.</td>
</tr>
<tr>
<td>HFC – Hybrid Fiber Coaxial</td>
<td>An outside plant distribution cabling concept employing both fiber-optic and coaxial cable.</td>
</tr>
<tr>
<td>ICT – Information and Communications Technology</td>
<td>Often used as an extended synonym for information technology (IT), but it is more specific term that stresses the role of unified communications and the integration of telecommunications, computers as well as necessary enterprise software, middleware, storage, and audio-visual systems, which enable users to access, store, transmit, and manipulate information.</td>
</tr>
<tr>
<td><strong>IEEE – Institute of Electrical Engineers</strong></td>
<td><strong>A professional association headquartered in New York City that is dedicated to advancing technological innovation and excellence.</strong></td>
</tr>
<tr>
<td><strong>ILEC – Incumbent Local Exchange Carrier</strong></td>
<td><strong>The traditional wireline telephone service providers within defined geographic areas. Prior to 1996, ILECs operated as monopolies having exclusive right and responsibility for providing local and local toll telephone service within LATAs.</strong></td>
</tr>
<tr>
<td><strong>IP-VPN – Internet Protocol-Virtual Private Network</strong></td>
<td><strong>A software-defined network offering the appearance, functionality, and usefulness of a dedicated private network.</strong></td>
</tr>
</tbody>
</table>
| **IRU - Indefeasible Right Use** | **A contractual agreement between the operators of a fiber optic network and a client for “exclusive, unrestricted, and indefeasible right to use one, a pair, or more strands of fiber of a fiber cable for any legal purpose.”**  

The contract, typically 10-20 years, defines detailed technical and performance specifications for the fibers. More specifically, it includes acceptance and testing procedures, the description of the physical route, operating specifications for the infrastructure, performance specifications, maintenance and restoration terms. These terms must be valid for the full duration of the contract. Moreover, it includes specific actions and procedures in cases of changes on the grantor's fiber network, degradation of fiber performance etc. |
<p>| <strong>ISDN – Integrated Services Digital Network</strong> | <strong>An alternative method to simultaneously carry voice, data, and other traffic, using the switched telephone network.</strong> |
| <strong>ISP – Internet Service Provider</strong> | <strong>A company providing internet access to consumers and businesses, acting as a bridge between customer (end-user) and infrastructure owners for dial-up, cable modem and DSL services.</strong> |
| <strong>ITS – Intelligent Traffic System</strong> | <strong>Advanced applications which, without embodying intelligence as such, aim to provide innovative services relating to different modes of transport and traffic management and enable various users to be better informed and make safer, more coordinated, and 'smarter' use of transport networks.</strong> |
| <strong>Kbps – Kilobits per second</strong> | <strong>1,000 bits per second. A measure of how fast data can be transmitted.</strong> |</p>
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LAN</strong> – Local Area Network</td>
<td>A geographically localized network consisting of both hardware and software. The network can link workstations within a building or multiple computers with a single wireless internet connection.</td>
</tr>
<tr>
<td><strong>LATA</strong> – Local Access and Transport Areas</td>
<td>A geographic area within a divested Regional Bell Operating Company is permitted to offer exchange telecommunications and exchange access service. Calls between LATAs are often thought of as long distance service. Calls within a LATA (IntraLATA) typically include local and local toll services.</td>
</tr>
<tr>
<td><strong>Local Loop</strong></td>
<td>A generic term for the connection between the customer's premises (home, office, etc.) and the provider's serving central office. Historically, this has been a copper wire connection; but in many areas it has transitioned to fiber optic. Also, wireless options are increasingly available for local loop capacity.</td>
</tr>
<tr>
<td><strong>MAN</strong> – Metropolitan Area Network</td>
<td>A high-speed intra-city network that links multiple locations with a campus, city or LATA. A MAN typically extends as far as 30 miles.</td>
</tr>
<tr>
<td><strong>Mbps</strong> – Megabits per second</td>
<td>1,000,000 bits per second. A measure of how fast data can be transmitted.</td>
</tr>
<tr>
<td><strong>MPLS</strong> – Multiprotocol Label Switching</td>
<td>A mechanism in high-performance telecommunications networks that directs data from one network node to the next based on short path labels rather than long network addresses, avoiding complex lookups in a routing table.</td>
</tr>
<tr>
<td><strong>ONT</strong> – Optical Network Terminal</td>
<td>Used to terminate the fiber-optic line, demultiplex the signal into its component parts (voice telephone, television, and internet), and provide power to customer telephones.</td>
</tr>
<tr>
<td><strong>Overbuilding</strong></td>
<td>The practice of building excess capacity. In this context, it involves investment in additional infrastructure projects to provide competition.</td>
</tr>
<tr>
<td><strong>OVS</strong> – Open Video Systems</td>
<td>OVS is a new option for those looking to offer cable television service outside the current framework of traditional regulation. It would allow more flexibility in providing service by reducing the build out requirements of new carriers.</td>
</tr>
<tr>
<td><strong>PON</strong> – Passive Optical Network</td>
<td>A Passive Optical Network consists of an optical line terminator located at the Central Office and a set of associated optical network terminals located at the customer's premise. Between them lies the optical distribution network comprised of fibers and passive splitters or couplers. In a PON network, a single piece of fiber can be run from...</td>
</tr>
</tbody>
</table>
the serving exchange out to a subdivision or office park, and then individual fiber strands to each building or serving equipment can be split from the main fiber using passive splitters / couplers. This allows for an expensive piece of fiber cable from the exchange to the customer to be shared amongst many customers, thereby dramatically lowering the overall costs of deployment for fiber to the business (FTTB) or fiber to the home (FTTH) applications.

<p>| PPP – Public-Private Partnership | A Public-Private Partnership (PPP) is a government service or private business venture that is funded and operated through a collaborative partnership between a government and one or more private sector organizations. In addition to being referred to as a PPP, they are sometimes called a P3, or P³. |
| QOS – Quality of Service | QoS (Quality of Service) refers to a broad collection of networking technologies and techniques. The goal of QoS is to provide guarantees on the ability of a network to deliver predictable results, which are reflected in Service Level Agreements or SLAs. Elements of network performance within the scope of QoS often include availability (uptime), bandwidth (throughput), latency (delay), and error rate. QoS involves prioritization of network traffic. |
| RF – Radio Frequency | a rate of oscillation in the range of about 3 kHz to 300 GHz, which corresponds to the frequency of radio waves, and the alternating currents which carry radio signals. |
| Right-of-Way | A legal right of passage over land owned by another. Carriers and service providers must obtain right-of-way to dig trenches or plant poles for cable systems, and to place wireless antennae. |
| RMS – Resource Management System | A system used to track telecommunications assets. |
| RPR – Resilient Packet Ring | Also known as IEEE 802.17, is a protocol standard designed for the optimized transport of data traffic over optical fiber ring networks. |
| RUS – Rural Utility Service | A division of the United States Department of Agriculture, it promotes universal service in unserved and underserved areas of the country with grants, loans, and financing. Formerly known as “REA” or the Rural Electrification Administration. |
| SCADA – Supervisory Control and Data Acquisition | A type of industrial control system (ICS). Industrial control systems are computer controlled systems that monitor and control industrial processes that exist in the physical world. |</p>
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>SONET – Synchronous Optical Network</td>
<td>A family of fiber-optic transmission rates.</td>
</tr>
<tr>
<td>Steaming</td>
<td>Streamed data is any information/data that is delivered from a server to a host where the data represents information that must be delivered in real time. This could be video, audio, graphics, slide shows, web tours, combinations of these, or any other real time application.</td>
</tr>
<tr>
<td>Subscribership</td>
<td>Subscribership is how many customers have subscribed for a particular telecommunications service.</td>
</tr>
<tr>
<td>Switched Network</td>
<td>A domestic telecommunications network usually accessed by telephone, key telephone systems, private branch exchange trunks, and data arrangements.</td>
</tr>
<tr>
<td>T-1 – Trunk Level 1</td>
<td>A digital transmission link with a total signaling speed of 1.544 Mbps. It is a standard for digital transmission in North America.</td>
</tr>
<tr>
<td>T-3 – Trunk Level 3</td>
<td>28 T1 lines or 44.736 Mbps.</td>
</tr>
<tr>
<td>UNE – Unbundled Network Element</td>
<td>Leased portions of a carrier’s (typically an ILEC’s) network used by another carrier to provide service to customers. Over time, the obligation to provide UNEs has been greatly narrowed, such that the most common UNE now is the UNE-Loop.</td>
</tr>
<tr>
<td>Universal Service</td>
<td>The idea of providing every home in the United States with basic telephone service.</td>
</tr>
<tr>
<td>Upstream</td>
<td>Data flowing from your computer to the internet (sending E-mail, uploading a file).</td>
</tr>
<tr>
<td>UPS – Uninterruptable Power Supply</td>
<td>An electrical apparatus that provides emergency power to a load when the input power source, typically main power, fails.</td>
</tr>
<tr>
<td>USAC – Universal Service Administrative Company</td>
<td>An independent American nonprofit corporation designated as the administrator of the Federal Universal Service Fund (USF) by the Federal Communications Commission.</td>
</tr>
<tr>
<td>VDSL – Very High Data Rate Digital Subscriber Line</td>
<td>A developing digital subscriber line (DSL) technology providing data transmission faster than ADSL over a single flat untwisted or twisted pair of copper wires (up to 52 Mbit/s downstream and 16 Mbit/s upstream).</td>
</tr>
<tr>
<td><strong>upstream), and on coaxial cable (up to 85 Mbit/s down and upstream); using the frequency band from 25 kHz to 12 MHz.</strong></td>
<td></td>
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</tr>
<tr>
<td><strong>Video on Demand</strong></td>
<td></td>
</tr>
<tr>
<td>A service that allows users to remotely choose a movie from a digital library whenever they like and be able to pause, fast-forward, and rewind their selection.</td>
<td></td>
</tr>
<tr>
<td><strong>VLAN – Virtual Local Area Network</strong></td>
<td></td>
</tr>
<tr>
<td>In computer networking, a single layer-2 network may be partitioned to create multiple distinct broadcast domains, which are mutually isolated so that packets can only pass between them via one or more routers; such a domain is referred to as a Virtual Local Area Network, Virtual LAN or VLAN.</td>
<td></td>
</tr>
<tr>
<td><strong>VoIP – Voice over Internet Protocol</strong></td>
<td></td>
</tr>
<tr>
<td>An application that employs a data network (using a broadband connection) to transmit voice conversations using Internet Protocol.</td>
<td></td>
</tr>
<tr>
<td><strong>VPN – Virtual Private Network</strong></td>
<td></td>
</tr>
<tr>
<td>A virtual private network (VPN) extends a private network across a public network, such as the internet. It enables a computer to send and receive data across shared or public networks as if it were directly connected to the private network, while benefitting from the functionality, security and management policies of the private network. This is done by establishing a virtual point-to-point connection through the use of dedicated connections, encryption, or a combination of the two.</td>
<td></td>
</tr>
<tr>
<td><strong>WAN – Wide Area Network</strong></td>
<td></td>
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<tr>
<td>A network that covers a broad area (i.e., any telecommunications network that links across metropolitan, regional, or national boundaries) using private or public network transports.</td>
<td></td>
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<tr>
<td><strong>WiFi</strong></td>
<td></td>
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<tr>
<td>WiFi is a popular technology that allows an electronic device to exchange data or connect to the internet wirelessly using radio waves. The Wi-Fi Alliance defines Wi-Fi as any &quot;wireless local area network (WLAN) products that are based on the Institute of Electrical and Electronics Engineers' (IEEE) 802.11 standards&quot;.</td>
<td></td>
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<tr>
<td><strong>WiMax</strong></td>
<td></td>
</tr>
<tr>
<td>WiMax is a wireless technology that provides high-throughput broadband connections over long distances. WiMax can be used for a number of applications, including “last mile” broadband connections, hotspot and cellular backhaul, and high speed enterprise connectivity for businesses.</td>
<td></td>
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<tr>
<td><strong>Wireless</strong></td>
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<tr>
<td>Telephone service transmitted via cellular, PCS, satellite, or other technologies that do not require the telephone to be connected to a land-based line.</td>
<td></td>
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<tr>
<td>Wireless Internet</td>
<td>1) Internet applications and access using mobile devices such as cell phones and palm devices. 2) Broadband Internet service provided via wireless connection, such as satellite or tower transmitters.</td>
</tr>
<tr>
<td>Wireline</td>
<td>Service based on infrastructure on or near the ground, such as copper telephone wires or coaxial cable underground or on telephone poles.</td>
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</table>
12. Appendix B – Economic Development Case Study

Who:
Bristol, Virginia, located in southwest Virginia

Background:
In 2001, Bristol Virginia Utilities (BVU) launched BVU Optinet to provide fiber-based telecommunication services to approximately 12,500 customers in the Southwest Virginia region. To accomplish this goal, BVU installed approximately 150 miles of fiber around and throughout the city of Bristol. BVU is acknowledged as the first municipal utility in the United States to deploy an all-fiber network offering the triple play of video, voice and data services.

In September 2005, based on the success of its city fiber deployment, BVU was asked to construct an additional 160 miles of fiber backbone to connect two planning district commissions (PDCs) in the region. BVU Optinet, in conjunction with the planning districts, created CPC Optinet to bring data and telephone services to the regions.

As a recipient of an NTIA/BTOP grant in 2010, BVU Optinet expanded its fiber footprint to nine counties in Southwest Virginia by installing an additional 388 miles of fiber. This gave economically challenged areas access to high-speed services critical to their survival.

Based on BVU Optinet’s continued successes and positive impact to the community, Bristol, Virginia became nationally recognized and received the 2008 GOLD AWARD for Municipal Excellence from the National League of Cities. In 2009, Bristol was acknowledged as a Top 7 Intelligent Community from the Intelligent Community Forum. It was the only U.S. City to make the list.

Economic and Community Impact:
In 2011, Bristol commissioned a study to try and quantify the impact that fiber has had on its economy and citizen’s. Below are some of the findings from that study.

- Access to high-speed fiber-based was one of the key points in attracting several large businesses to Bristol and the surrounding areas served by BVU Optinet.
  - Northrop Grumman – Company manages a large number of activities and processes for the Commonwealth of Virginia, and has added over 700 new jobs in rural Southwest Virginia
  - CGI - A $3.6 Billion IT and systems integration company with 26,000 employees, opened a Technology Center in Lebanon, VA in December 2007. At the opening ceremony, CGI CEO, Michael Roach, praised the Lebanon center as CGI’s first in “rural America” and a key part of CGI’s strategy to keep its major business centers “onshore” in the US instead of sending them to low wage countries. Already, CGI has added over 400 jobs to rural Southwest Virginia.
  - Universal Fibers – Provides high tech processes for recycling and colorization of poly fibers. Recently recognized by the Governor of Virginia for excellence in sustainability processes. Added
over 330 jobs to the area. Expected to expand capital spending by up to twenty million dollars in next five years. Per company, “Reliable and very High Speed Broadband is critical for Universals continued expansion”.

» DirecTV – A satellite company is creating 100 jobs in a virtual call center. Gary Qualls, Vice-President Customer Care, commented that “The remote agents hired by DIRECTV are able to work from home due to the high-speed Internet access available in many communities throughout our region”.

» CPC OptiNet – A partner of BVU Optinet in rural Southwest Virginia offering data and telephone services to businesses and anchor institutions has over 600 data business customers.

- 169 organizations reported on fiber impact to sales
  » 18% reported a total increase to sales of $2,711,250 in the previous 12 months
  » Average increase in sales of $21,017 per organization
  » 71% reported cost savings due to fiber use
  » Total cost saving equaled $354,105 in previous 12 months
  » Average cost savings per organization of $2,951
  » Net increase in employment of 286 jobs in the previous 12 months
  » Net increase in employment of 10.1% due to fiber

- Fiber use has direct and measurable benefits to businesses and organizations on local economy
  » Extrapolating survey results to all fiber users indicates significant potential impact to the community
    ▪ Direct increase in sales revenues of $19.4M per year
    ▪ Net cost savings of $2.7M per year
    ▪ Increased sales and cost savings contribute to business growth and additional employment
    ▪ Indirect effects flow through to non-fiber businesses that provide goods and services in the community
  » Allowed more telecommuting
    ▪ Days worked from home increased
    ▪ Nearly 17% work more from home directly because of FTTH
    ▪ Average of 12 days more
    ▪ New DirecTV call center all from work at home (100 plus jobs as of 2011)
  » Estimated cost savings to internet users from 2007 to 2011 due to fiber equaled $1,622,382

- Additional feedback from fiber business and residential users
  » Speed and bandwidth were widely cited as key benefits for quality-of-life
  » Many recognized the increased reliability of fiber compared to prior forms of access
  » Service pricing, customer service and support were also cited as benefits of moving to fiber
  » The most common perceived benefits from businesses were that fiber makes operations easier, increasing efficiency and saving time
    ▪ 60% cite cost saving as important
- 69% have adopted new processes
- 68% see marketing benefits
- 60% say fiber is important for sales

Organizations are increasingly incorporating high-speed capabilities into their daily operations
- Large document transfer
- Real-time communications with customers and suppliers
- Online-transactions, and research

In addition to economic impact to the area, fiber-based high speed access has allowed or enhanced services to businesses and residents. Many of these services would not have been available or affordable without the fiber infrastructure deployed in Bristol and surrounding areas. A few of these services include:

- Online video sharing
- Internet video
- Telemedicine
- 24-hour home monitoring
- On-line education
- Video conferencing
- Energy management (Smart Grid)
- Business security (alarms, cameras, etc.)

Comments from Local Businesses on Impact of Fiber:

- “There are two major reasons. One, if we didn't have it we would have to move the business out of the community. Second, we are anticipating doubling our staff and profit and if it weren’t for the broadband we wouldn’t be able to accomplish that.” - Publishing (10 employees)
- “The main change is in file transfer. We deal a lot with electronic artwork in the printing industry, and it has enabled us to more fluidly conduct business on the artwork side.” - Printing (6 employees)
- “Research has been the biggest area which it has helped as well as access to online training materials. It reduces the time for the office staff to access external documents and serve customers.” - Engineering firm (73 employees)
- “Over fiber I'm able to transfer home and commercial building plans, engineering, and design modifications. Over dial up it would take hours to do download this information.” - Building materials retail (5 employees)
- “Time saved is $$$. We have to communicate with our manufacturers and there would be no way to do this over dial-up due to the size of files that are transmitted and received. More and more departments have to communicate via PC's. Dial-up couldn't handle.” - Auto dealer (40 employees)
13. Appendix C – Business Broadband Survey Results

Under Separate Cover

Business Broadband Assessment & Feasibility Study
City of New Braunfels
Survey Results (Appendix C)
14. Appendix D – Public Policy – Samples

Under Separate Cover

*Business Broadband Assessment & Feasibility Study*
*City of New Braunfels*
*Policy Samples (Appendix D)*
Business Broadband Assessment & Feasibility Study
City of New Braunfels
Survey Results
(Appendix B)

Prepared by: Magellan Advisors
Released: June 22, 2015
Version: 1.0
**Table of Contents**

1. Business Addresses / Number of Employees.............................................................................................................. 3
2. Business Industry Classifications............................................................................................................................... 8
3. Current Internet Providers and Speed Information ...................................................................................................... 10
5. Are Current Internet Services Fulfilling Business Needs? ............................................................................................ 12
6. If “No” For #4, in What Way Is Your Internet Insufficient? ....................................................................................... 13
7. If “No” For #4, Why Haven't Internet Services Been Upgraded? .............................................................................. 14
8. Current Internet Services Ratings............................................................................................................................... 15
9. Importance of Having Multiple Choices of Internet And Broadband Providers......................................................... 16
1. Business Addresses / Number of Employees

Summary:

Number of Responding Businesses: 132

*Please note that not all businesses entered data for all categories, therefore total responses may not equal the total number of responding businesses*

Answered: 128  Skipped: 4

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<th>Breakdown by City</th>
<th># Businesses</th>
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<td>0.8%</td>
</tr>
<tr>
<td>Canyon Lake</td>
<td>1</td>
<td>0.8%</td>
</tr>
<tr>
<td>Natural Bridge Caverns</td>
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<td>0.8%</td>
</tr>
<tr>
<td>New Braunfels</td>
<td>124</td>
<td>96.9%</td>
</tr>
<tr>
<td>Sattler</td>
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<td>0.8%</td>
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Answered: 129  Skipped: 3

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<th># of Employees By Size Category (New Braunfels Only)</th>
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<th>Medium (between 11 and 50)</th>
<th>Medium-Large (between 51 and 100)</th>
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<td>80</td>
<td>30</td>
<td>5</td>
<td>14</td>
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<td></td>
<td>(62.02%)</td>
<td>(23.26%)</td>
<td>(3.88%)</td>
<td>(10.85%)</td>
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Detail:

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<th>Business Name</th>
<th>Address</th>
<th># of Employees (New Braunfels Only)</th>
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<td>Tejas Direct Inc</td>
<td>585 Anns Way</td>
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<td></td>
<td>Blanco</td>
<td>78606</td>
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<td></td>
<td>Two in New B and two in Blanco.</td>
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<td>Yogi Bear Jellystone Resort</td>
<td>12915 Fm 306</td>
<td>26</td>
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<td>Canyon Lake</td>
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<td>Natural Bridge Caverns, Inc.</td>
<td>26495 Natural Bridge Caverns Road</td>
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<td></td>
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<td>Acorn: Educational Consulting</td>
<td>415 Blue Spruce</td>
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<td>C. Herb Skoog</td>
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<td>Curley Chiropractic, LLC</td>
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<td>Detex Corporation</td>
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<td>376 Landa Street</td>
<td>New Braunfels</td>
</tr>
<tr>
<td>Marriott International (Remote Location)</td>
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<tr>
<td>Moeller &amp; Associates</td>
<td>1040 N. Walnut, Ste B</td>
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<tr>
<td>Monsterweb</td>
<td>1259 Loop 337</td>
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<td>Ncs Solutions</td>
<td>625 Creekside Way, Stephanie 1747</td>
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<td>New Braunfels Area Community Foundation</td>
<td>801 W. San Antonio</td>
<td>New Braunfels</td>
</tr>
<tr>
<td>New Braunfels Herald-Zeitung</td>
<td>549 Landa Street</td>
<td>New Braunfels</td>
</tr>
<tr>
<td>New Braunfels Isd</td>
<td>430 W. Mill St.</td>
<td>New Braunfels</td>
</tr>
<tr>
<td>New Braunfels Leasing &amp; Resorts</td>
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<td>New Braunfels Properties</td>
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<td>441 N Guenther</td>
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<tr>
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<td>441 N Guenther</td>
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<tr>
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<tr>
<td>New Braunfels Utilities</td>
<td>263 E. Main Plaza</td>
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<td>Older Achievers</td>
<td>2071 Kuehler Ave</td>
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</tr>
<tr>
<td>Oroian, Guest &amp; Little Pc</td>
<td>524 S. Seguin</td>
<td>New Braunfels</td>
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<td>Parks And Recreation</td>
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<td>Scott J Realtor Group Of Keller Williams Realty</td>
<td>453 W San Antonio St</td>
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<td>ScottJrealtor Group Of Keller Williams Realty</td>
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<tr>
<td>Sh Utility, LLC</td>
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<tr>
<td>Sperry Van Ness / Norris Commercial Group</td>
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<tr>
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<td>Norris Commercial Group</td>
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</tr>
<tr>
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<tr>
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<tr>
<td>Company Name</td>
<td>Address</td>
<td>City</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
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<td>The Ammo Group</td>
<td>251 West San Antonio Street</td>
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<tr>
<td>The Herald-Zeitung</td>
<td>549 Landa St.</td>
<td>New Braunfels</td>
</tr>
<tr>
<td>The It Guys</td>
<td>1386 Industrial Dr, Suite 110</td>
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</tr>
<tr>
<td>United Way Of Comal County</td>
<td>468 S. Seguin Ave, Ste 403</td>
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<td>Utsa</td>
<td>800 W. San Antonio</td>
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</tr>
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<td>Valmark Chevrolet</td>
<td>725 South Ih 35</td>
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<td>White Tucker Co.</td>
<td>1555 North Business 35</td>
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<td>Wingate By Wyndham</td>
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<td>Woods Cycle Country</td>
<td>1933 N Interstate 35</td>
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<td>Yourdocumentary.Com (A Sole Proprietorship From A Home Office)</td>
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<td>Nbu</td>
<td>263 Main Plaza</td>
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<tr>
<td>Amcs-USA</td>
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<td>Ballistic Marketing Group</td>
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<td>Bob’Z Enterprises, LLC</td>
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<td>Christian Brothers Automotive</td>
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<tr>
<td>Genesis Construction</td>
<td>1319 Fm 1863</td>
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<tr>
<td>Gvtc. Communications</td>
<td>36101 Fm 3159</td>
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<tr>
<td>Huaco Springs Ranch</td>
<td>3735 River Rd.</td>
<td>New Braunfels</td>
</tr>
<tr>
<td>Huaco Springs Ranch /Judge R.T. Pfeuffer Office</td>
<td>3735 River Rd.</td>
<td>New Braunfels</td>
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<tr>
<td>Ibex Global</td>
<td>1672 Independence Drive</td>
<td>New Braunfels</td>
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<tr>
<td>Judge Robert T. Pfeuffer</td>
<td>3735 River Road</td>
<td>New Braunfels</td>
</tr>
<tr>
<td>New Braunfels Christian Academy</td>
<td>220 Fm 1863</td>
<td>New Braunfels</td>
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<td>Outlier Engineering</td>
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<td>R&amp;R Assoc.</td>
<td>521 Hunters Creek Dr.</td>
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<td>River Road Nurseries / Tiefenbach Consulting</td>
<td>3485 River Rd.</td>
<td>New Braunfels</td>
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<td>Ron Reaves &amp; Associates, LLC</td>
<td>521 Hunters Creek Dr.</td>
<td>New Braunfels</td>
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<td>Spass Walking Tours Of New Braunfels</td>
<td>2232 Granada Hills</td>
<td>New Braunfels</td>
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<tr>
<td>The Harvest</td>
<td>363 Texas Country Dr.</td>
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</tr>
<tr>
<td>The Harvest</td>
<td>363 Texas Country Dr.</td>
<td>New Braunfels</td>
</tr>
<tr>
<td>&lt;No name given&gt;</td>
<td>825 San Fernando</td>
<td>New Braunfels</td>
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<tr>
<td>Coldwell Banker D’Ann Harper, Realtors</td>
<td>532 S. Segin</td>
<td>New Braunfels</td>
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<tr>
<td>Standard Casualty Co</td>
<td>100 Northwoods Dr</td>
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<tr>
<td>&lt;No name or address given&gt;</td>
<td></td>
<td>Sattler</td>
</tr>
<tr>
<td>&lt;No name or address given&gt;</td>
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<td>Sattler</td>
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<td>&lt;No name or address given&gt;</td>
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<tr>
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2. Business Industry Classifications

Answered: 102    Skipped: 30
<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodation and food services</td>
<td>4.90%</td>
</tr>
<tr>
<td>Agricultural &amp; Farming</td>
<td>4.90%</td>
</tr>
<tr>
<td>Arts, entertainment, and recreation</td>
<td>7.34%</td>
</tr>
<tr>
<td>Construction</td>
<td>4.90%</td>
</tr>
<tr>
<td>Educational services</td>
<td>6.36%</td>
</tr>
<tr>
<td>Finance and insurance</td>
<td>6.36%</td>
</tr>
<tr>
<td>Healthcare and social assistance</td>
<td>7.34%</td>
</tr>
<tr>
<td>Hospitality</td>
<td>5.88%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>9.30%</td>
</tr>
<tr>
<td>Professional, scientific, and technical services</td>
<td>33.33%</td>
</tr>
<tr>
<td>Real estate, rental and leasing</td>
<td>19.61%</td>
</tr>
<tr>
<td>Retail trade</td>
<td>3.92%</td>
</tr>
<tr>
<td>Transportation and warehousing</td>
<td>2.94%</td>
</tr>
<tr>
<td><strong>Total Respondents: 102</strong></td>
<td></td>
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3. Current Internet Providers and Speed Information

<table>
<thead>
<tr>
<th>Internet Provider</th>
<th>Businesses</th>
<th>%</th>
<th>Average Download (Mbps)</th>
<th>Average Upload (Mbps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT&amp;T</td>
<td>23</td>
<td>19.2%</td>
<td>15.23</td>
<td>4.67</td>
</tr>
<tr>
<td>Birch Telephone</td>
<td>1</td>
<td>0.8%</td>
<td>5.18</td>
<td>0.66</td>
</tr>
<tr>
<td>Clear Wireless</td>
<td>1</td>
<td>0.8%</td>
<td>5.34</td>
<td>1</td>
</tr>
<tr>
<td>Cox Communications</td>
<td>2</td>
<td>1.7%</td>
<td>27.09</td>
<td>19.78</td>
</tr>
<tr>
<td>Don‘T Know - Comal County</td>
<td>1</td>
<td>0.8%</td>
<td>1.13</td>
<td>0.26</td>
</tr>
<tr>
<td>Education Service Center Region 13</td>
<td>1</td>
<td>0.8%</td>
<td>93.7</td>
<td>91.06</td>
</tr>
<tr>
<td>GVTC</td>
<td>5</td>
<td>4.2%</td>
<td>30.97</td>
<td>7.12</td>
</tr>
<tr>
<td>IT Guys of New Braunfels</td>
<td>3</td>
<td>2.5%</td>
<td>30.45</td>
<td>28.25</td>
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<tr>
<td>Not Sure</td>
<td>1</td>
<td>0.8%</td>
<td>20.86</td>
<td>4.42</td>
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<tr>
<td>Reallinx - Fiber Provider</td>
<td>2</td>
<td>1.7%</td>
<td>45.79</td>
<td>46.33</td>
</tr>
<tr>
<td>Sprint</td>
<td>2</td>
<td>1.7%</td>
<td>0.5</td>
<td>0.48</td>
</tr>
<tr>
<td>Texas Wireless</td>
<td>1</td>
<td>0.8%</td>
<td>1.52</td>
<td>No upload data provided</td>
</tr>
<tr>
<td>The People’S Republic Of Time Warner Cable</td>
<td>1</td>
<td>0.8%</td>
<td>15.92</td>
<td>1.11</td>
</tr>
<tr>
<td>Time Warner</td>
<td>71</td>
<td>59.2%</td>
<td>18.43</td>
<td>4.38</td>
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<tr>
<td>Verizon</td>
<td>4</td>
<td>3.3%</td>
<td>7.67</td>
<td>4.12</td>
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<tr>
<td>Windstream</td>
<td>1</td>
<td>0.8%</td>
<td>8.81</td>
<td>9.24</td>
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<table>
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<tr>
<th>Overall Speed Statistics</th>
<th>Minimum (Mbps)</th>
<th>Provider</th>
<th>Maximum (Mbps)</th>
<th>Provider</th>
<th>Average (Mbps)</th>
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<tr>
<td>Download</td>
<td>0.2</td>
<td>AT&amp;T</td>
<td>95.76</td>
<td>GVTC</td>
<td>18.48</td>
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<tr>
<td>Upload</td>
<td>0.09</td>
<td>Time Warner</td>
<td>91.06</td>
<td>Education Service Center Region 13</td>
<td>6.4</td>
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</table>
4. Impact of Internet Problems Including Reliability & Speed On Business?

Answered: 130  Skipped: 2

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
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</thead>
<tbody>
<tr>
<td>No disruption</td>
<td>1.54%</td>
</tr>
<tr>
<td>Minimal disruption</td>
<td>13.08%</td>
</tr>
<tr>
<td>Moderate disruption</td>
<td>24.62%</td>
</tr>
<tr>
<td>Severe disruption</td>
<td>42.31%</td>
</tr>
<tr>
<td>Total disruption</td>
<td>18.46%</td>
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**Total**                  | 130
5. Are Current Internet Services Fulfilling Business Needs?

Answered: 131    Skipped: 1

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
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<tbody>
<tr>
<td>Yes</td>
<td>31.30%</td>
</tr>
<tr>
<td>No</td>
<td>58.78%</td>
</tr>
<tr>
<td>Not sure</td>
<td>9.92%</td>
</tr>
<tr>
<td>Total</td>
<td>131</td>
</tr>
</tbody>
</table>
6. If “No” For #4, in What Way Is Your Internet Insufficient?

Answered: 79    Skipped: 53

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not fast enough</td>
<td>43.04%</td>
</tr>
<tr>
<td>Unreliable</td>
<td>37.97%</td>
</tr>
<tr>
<td>Availability of options (service type, bandwidth)</td>
<td>16.46%</td>
</tr>
<tr>
<td>Access to technical support</td>
<td>2.53%</td>
</tr>
<tr>
<td>Total</td>
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</tbody>
</table>
7. If “No” For #4, Why Haven't Internet Services Been Upgraded?

Answered: 67    Skipped: 65

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>I don't know who can provide services in my area</td>
<td>14.53%</td>
</tr>
<tr>
<td>Services are not available in my area</td>
<td>43.28%</td>
</tr>
<tr>
<td>I don't have the technical skills necessary</td>
<td>5.97%</td>
</tr>
<tr>
<td>The price is too high</td>
<td>35.82%</td>
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<tr>
<td>Total</td>
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</table>
8. Current Internet Services Ratings

Answered: 129    Skipped: 3

(5 = most important, 1 = least important)

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<tr>
<th>Service</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Total</th>
<th>Weighted Average</th>
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</thead>
<tbody>
<tr>
<td>Price</td>
<td>3.10%</td>
<td>7.75%</td>
<td>29.46%</td>
<td>42.64%</td>
<td>17.05%</td>
<td>129</td>
<td>3.63</td>
</tr>
<tr>
<td>Reliability</td>
<td>3.10%</td>
<td>0.78%</td>
<td>10.08%</td>
<td>10.08%</td>
<td>75.97%</td>
<td>98</td>
<td>4.55</td>
</tr>
<tr>
<td>Speed</td>
<td>2.34%</td>
<td>4.69%</td>
<td>8.59%</td>
<td>77.34%</td>
<td>57.03%</td>
<td>73</td>
<td>4.32</td>
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<tr>
<td>Customer Service</td>
<td>0.78%</td>
<td>12.50%</td>
<td>23.44%</td>
<td>33.59%</td>
<td>28.69%</td>
<td>128</td>
<td>3.79</td>
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9. Importance of Having Multiple Choices of Internet And Broadband Providers

Answered: 131    Skipped: 1

<table>
<thead>
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<th>Answer Choices</th>
<th>Responses</th>
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</thead>
<tbody>
<tr>
<td>Not important</td>
<td>3.05%</td>
</tr>
<tr>
<td>Somewhat important</td>
<td>7.63%</td>
</tr>
<tr>
<td>Moderately important</td>
<td>19.08%</td>
</tr>
<tr>
<td>Very important</td>
<td>45.80%</td>
</tr>
<tr>
<td>Extremely important</td>
<td>24.43%</td>
</tr>
<tr>
<td>Total</td>
<td>131</td>
</tr>
</tbody>
</table>
Table of Contents

1. OVERVIEW ............................................................................................................................................................................. 3
2. SAMPLE GENERAL PLAN COMMUNICATION POLICY ........................................................................................................... 3
3. SAMPLE DEVELOPMENT STANDARDS ................................................................................................................................... 17
4. SAMPLE TELECOMMUNICATIONS INFRASTRUCTURE IMPROVEMENT ORDINANCE ................................................................. 25
5. SAMPLE JOINT TRENCHING AGREEMENT ................................................................................................................................ 29
6. SAMPLE ENGINEERING OUTSIDE PLANT (OSP) STANDARDS .................................................................................................. 49
1. Overview

The following samples and templates are taken, with permission, from other municipalities in other states. These samples and templates should be used as guidelines for creating your own policies and standards and will need to be altered to adhere to your local rules and regulations.

2. Sample General Plan Communication Policy

I. ISSUES / OPPORTUNITIES / CONSTRAINTS

Communications

1. Telecommunications infrastructure and services are critical components for long-term growth and sustainability for the County, as they provide the basic resources necessary for businesses to operate and add to the quality of life for residents. Increasingly, business success is tied to online accessibility, including e-commerce solutions, discoverability, and the overall necessity of high-quality broadband capable of high speeds with symmetric up and down transfer rates. Of equal importance is broadband to residents for access to online education, research, employment, health care, and government resources.

2. Historically, Mono County has suffered from a lack of quality broadband due to our rural nature and low population with dispersed community areas. With the installation of Digital 395 (see III.C. Definitions for more information) in 2013, however, capacity issues will be resolved and new opportunities will arise.

3. With the rapid advances in mobile device technology, both providers and subscribers are increasingly looking to mobile solutions to help fill communication gaps and provide alternatives to typical fixed deployments. While the mobile alternatives are extremely valuable at fulfilling their role, they are not a panacea for solving broadband issues throughout the county.

4. The primary issues with the mobile broadband solution are the data caps that are placed on customers, the overall cost of the service, and the typical requirement of a long-term contract in order to receive the service. While these are hurdles typically overcome by those looking to utilize this technology as a secondary method for accessing the Internet, for those who are looking at it as their primary, they may be insurmountable.
5. For the most part, some form of cellular coverage exists in almost every community; however, it is carrier dependent. AT&T and Verizon are the two main carriers, whose coverage models overlap, but do not provide the same coverage in all of the same areas. In addition to some communities not having cellular service, there are significant sections of our primary highway corridors without coverage, which poses safety concerns and convenience issues for travelers.

6. With Digital 395, cellular coverage throughout the county may improve as new sites are developed and existing sites improved with upgraded technology that adopts a fiber-fed backhaul. This development pattern is important, and should be considered strategically and implemented thoughtfully in order to meet goals and objectives while adhering to policies and parameters.

7. Within the context of non-mobile broadband technology, Mono County continues to struggle with the basic aspects of accessibility, reliability, and adoption. These three aspects are closely related to each other, as the region as a whole has been starved of quality Internet until very recently. Where service is accessible (mainly in the major community areas), the reliability and usability of that service has not always been great enough to motivate everyone to adopt. Coupled with the demographics of the region (a mix of income levels, education, age, and ethnicities), a portion of the population still does not use the Internet.

8. Outside of the Town of Mammoth Lakes and the community of June Lake, most communities do not have more than one Internet Service Provider. For the most part, smaller communities are serviced by a single fixed wireless provider (Schat.net), leaving only one other small, wireline provider (Escape Broadband) to compete with the bigger companies offering wireline service – Suddenlink and Verizon.

9. Due to limited competition, the market in each community has been dominated by a single (non-mobile) carrier, which limits consumer choice, stifles competition, and does not afford redundancy. In addition, business use of Internet is limited to residential grade service plans, with only a small number of T1 type connections, or similar higher speed service offerings. In general, this has not only resulted in those businesses being confined to Mammoth or June Lake, but also made it difficult or financially impractical for businesses to get higher speeds or symmetric service offerings.

10. A high priority is placed on broadband market development, and the engagement of Mono County in the regional deployment of this critical infrastructure. Participation in local, regional, statewide, and federal efforts that are aimed at the improved diffusion of broadband and communications technology is an important part of achieving the goals and objectives.
II. DEFINITIONS

Communications

1. Digital 395: A 583-mile long Middle Mile fiber optic project between Carson City, NV and Barstow, CA. This project was jointly funded by the U.S. Department of Commerce under the American Recovery and Reinvestment Act of 2009 (ARRA), and a ratepayer fund dedicated to broadband development known as the California Advanced Services Fund which is administered by the California Public Utilities Commission.

2. California Broadband Cooperative: A not-for-profit telephone cooperative that will serve as the long-term owner and operator of the Digital 395 network.

3. Praxis Associates, Inc.: A recognized California-based fiber optic development firm responsible for securing the funding and serving as the lead on the design, management, and construction of the Digital 395 project.

4. Middle Mile: In utilities and telecommunication networks, this is the core portion of the infrastructure that provides the high-capacity, long-haul routes from points of origin for service to local service providers and smaller distribution networks.

5. Last Mile: In utilities and telecommunication networks, this is the local network that delivers service to consumers, as developed and carried out by Internet Service Providers (ISPs).

6. Anchor: As it relates to Digital 395, these are government, education and medical facilities, and service provider points of interconnect where services are provided by Digital 395.

7. Node: As it relates to Digital 395, these are locations along the fiber route where hardware is located that amplifies signal in the fiber, routes traffic on the network, and provides points of interconnect.

8. Fiber Access Point (FAP): Typically located in underground vaults, these are points of access to fibers broken out from the Digital 395 backbone for the purpose of providing a point of interconnect for future middle or last mile services.

9. Network Interface Device (NID): A piece of technology installed at anchors where the Digital 395 network is terminated and can be interfaced with a local network.
10. **Mobile Wireless:** A general term used to describe broadband service that is offered typically by cellular carriers via 3G, 4G, LTE or similar types of networks to smartphones, tablets, and other mobile technology.

11. **Fixed Wireless:** A term used to describe broadband service that is offered by an Internet Service Provider via wireless infrastructure that is installed on premise and aimed at a repeater site.

12. **Wireline:** A general term that is used to describe a connection to the Internet which is provided via hardwire, as in the case of DSL, Cable, or Fiber based technologies.

II. **POLICIES**

**Communications**

**Broadband Distribution and Quality of Service**

**Goal 1.** Facilitate the distribution of the best broadband service possible, to as many users within community areas and key transportation corridors as possible, in a timely and cost effective manner that minimizes impacts to visual and natural resources.

**Objective 1.A.** Work with providers to deliver the best service possible to Mono County residents, businesses, and visitors.

**Policy 1.A.1.** Providers shall develop new infrastructure projects using the best available technology that meets or exceeds current industry standards and is consistent with Goal 2.

**Action 1.A.1.a.** Providers shall meet or exceed standards set by the California Advanced Services Fund (CASF) for 'Served' communities.¹

**Action 1.A.1.b.** Encourage new infrastructure projects to use high-capacity wireline solutions (such as Fiber-to-the-Premise). Providers should demonstrate a justification for alternative technologies requirements when wireline is impractical.

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¹ California Advanced Services Fund is a division of the California Public Utilities Commission (CPUC) and is responsible for increasing broadband adoption in hard to reach areas of California. More information at [http://www.cpuc.ca.gov/PUC/Telco/Information+for+providing+service/CASF/index.htm](http://www.cpuc.ca.gov/PUC/Telco/Information+for+providing+service/CASF/index.htm).
Policy 1.A.2. Providers shall develop and deliver services that improve accessibility to high quality broadband while protecting consumers and ensuring fair and equal access to those utilizing services within the County.

Action 1.A.2.a. Ensure Internet Service Providers (ISPs) possess a current Business License, and be current on all applicable Franchise Licenses, taxes, and fee payments.

Action 1.A.2.b. ISPs shall furnish and uphold Customer Service Standards that provide privacy protection, clear service and billing procedures, reliability, or a similar service level agreement, and means by which to contest service not meeting said standards.

Action 1.A.2.c. The County should work with providers to establish and maintain consumer awareness information and materials. Periodically review and publish information on local providers based on service standards, including but not limited to coverage area, speeds, etc.

Objective 1.B. Deploy broadband to as many community areas and key transportation corridors as possible, and pursue additional providers to increase competition, and improve quality of service.

Policy 1.B.1. Work with providers and other entities to develop projects that deliver broadband service to all communities.

Action 1.B.1.a. Establish and maintain a list of high priority communities that can be referred to when providers are looking to build new projects.

Action 1.B.1.b. Actively seek out providers and other reasonable alternatives to establish broadband service in unserved communities throughout the County.

Action 1.B.1.c. Coordinate and work with Eastern Sierra Connect Regional Broadband Consortium (ESCRBC) and other entities to locate funding opportunities for providers interested in building projects in 'unserved' and 'underserved' communities.

Action 1.B.1.d. Pursue additional providers or other reasonable alternatives to improve the quality of service, competition, and reliability in communities throughout the County.
Action 1.B.1.e. Look for opportunities to establish access to broadband in other rural or outlying areas for the purpose of enhancing Health & Safety or Economic Development purposes where traditional approaches or solutions are impractical.

Policy 1.B.2. Establish free WiFi in public spaces including County buildings, parks, community centers, and in commercial corridors in community areas.

Action 1.B.2.a. Provide free WiFi for public use in County offices and facilities.

Action 1.B.2.b. Work with service providers to establish free WiFi in commercial corridors and other public areas to support and promote local businesses.

Action 1.B.2.c. Limit speeds on public WiFi networks so as not to compete with residential or business connections offered by local service providers.

Design and Placement of Communications Infrastructure

Goal 2. Ensure deployment and implementation minimizes impacts to visual and natural resources. Provide development standards for communication infrastructure located throughout the County.

Objective 2.A. Minimize the impact on the environment and scenic resources of communications projects and infrastructure.

Policy 2.A.1. Providers shall utilize distribution practices that cause the least amount of long-term/significant environmental and visual impacts, including the use of design and screening tactics (also see Mono County Design Guidelines).

Action 2.A.1.a. Projects shall comply with requirements in Chapter 11, Section 11.010, of the Land Use Element.

Action 2.A.1.b. To support utilization of existing infrastructure and co-location, the County should maintain a database of existing communications infrastructure that can be referenced when evaluating projects and prior to permitting, and that is available to providers.

Action 2.A.1.c. Encourage placement of towers outside of community areas.

Policy 2.A.2. Underground existing overhead infrastructure when possible.
Action 2.A.2.a. Seek and utilize Rule 20, grant funds, public-private partnerships, or other creative funding opportunities, such as loans or mortgages, to underground infrastructure.

Action 2.A.2.b. Utilize a community-based public planning process to help identify and prioritize future undergrounding projects; review area plans for existing community direction.

Action 2.A.2.c. Establish an inventory and set of priorities for each community for future undergrounding projects based on areas of high preference or priority, as driven by public safety, reliability, community benefit (commercial cores, downtowns, etc.), or visual blight issues.

Action 2.A.2.d. Maintain an inventory of all underground districts and past funded projects in the County.

Policy 2.A.3. Utilize existing permit review procedures, such as the Land Development Technical Advisory Committee, to ensure project compliance and engage interested County departments, including Information Technology (IT), and other stakeholders.

Objective 2.B. Develop and manage underground infrastructure as 'basic infrastructure' that adheres to standards, is available for public use, and is managed as an asset in line with other public property.

Policy 2.B.1. Underground infrastructure shall be installed in accordance with standards specified in Chapter 11, 11.010, regarding placement, material, and method, and should adhere to other best practices.

Action 2.B.1.a. Conduit in public streets should be placed a minimum depth of three feet.

Action 2.B.1.b. Conduit installed for the purposes of Middle-Mile or long-haul routes, or that is installed in major streets or arterials should be the equivalent minimum of 4" in diameter.

Action 2.B.1.c. Conduit installed for the purposes of Last-Mile or distribution routes should be a minimum of 1½" in diameter.

Action 2.B.1.d. Conduit should be installed at the intersection of streets that is the equivalent of at least 4" in diameter and made accessible via vaults or similar appropriate means.
Action 2.B.1.e. Encourage the use of microduct or similar technology in conduit installations so as to segregate providers.

Action 2.B.1.f. A reasonable amount of space shall be retained by the owner of the underground infrastructure for the purpose of their potential future use.

Action 3.B.1.g. Allow developers who install conduit to recover their costs through renting or leasing space in conduit at a fair and competitive price until the point that the cost of installation is paid off.

Strategic Planning For Communications Infrastructure

Goal 3. Plan for the improvement and expansion of the communications infrastructure network by seeking cost-effective and efficient solutions.

Objective 3.A. Utilize County property and rights-of-way, or other public spaces and resources, for communication sites or infrastructure.

Policy 3.A.1. The County shall provide sites or space for communication facilities, including cabinet structures, pedestals, antennas, etc. where appropriate and feasible.

Action 3.A.1.a. Develop and maintain an inventory of viable sites, permissible uses, associated costs, power and backhaul access, and other relevant information on County property and rights-of-way.

Action 3.A.1.b. Consolidate and co-locate facilities on County property or rights-of-way without interfering with County infrastructure, and design new facilities and projects taking into consideration future communication infrastructure.

Action 3.A.1.c. Review locations of Digital 395 Fiber Access Points (FAPs) within County Rights of Way and determine how providers may utilize or access FAP and install necessary infrastructure in Right of Way.

Policy 3.A.2. Projects conducted on County property, including rights-of-way, shall follow a 'Dig Once' objective.

Action 3.A.2.a Install conduit in public streets during construction/re-construction for future communications infrastructure use.

Action 3.A.2.b. Accommodate construction of conduit laterals leading to private property for potential future use.
Policy 3.A.3. Interested parties shall be notified of any opportunity for installing additional conduit or infrastructure in open trenches in County right-of-way.

Action 3.A.3.a. Look for opportunities to place new conduit through joint utility trenches.

Action 3.A.3.b. Require formal notification of utilities and interested parties of a joint trench opportunity prior to issuance of permit for construction work.


Policy 3.A.4. Underground infrastructure in County rights-of-way shall be accessible and remain available for use by qualified providers.

Action 3.A.4.a. Accept offers of dedication for underground infrastructure from private developers and maintain conduit in the public's interest.

Action 3.A.4.b. Work with special districts, quasi-public entities, or third-party companies and vendors for long-term ownership or management of underground conduit, so long as the infrastructure remains available to the public at a fair price and in an open and competitive manner.

Policy 3.A.5. Leverage existing broadband infrastructure, including Digital 395, before constructing new infrastructure.

Action 3.A.5.a. Lease existing bandwidth, dark fiber, or conduit space from California Broadband Cooperative when network routes parallel Digital 395 infrastructure.

Policy 3.A.6. Collaborate with public land managers and other agencies to provide infrastructure locations consistent with Mono County's policies and regulations.

Action 3.A.6.a. Encourage use of public land for site location and pursue opportunities with federal agencies, special districts, or local agencies.

Action 3.A.6.b. Work with land management agencies to ensure knowledge and understanding of future development plans, County General Plan policies and guidelines, and find opportunities to synchronize policies and objectives between entities.
Objective 3.B. Design communication infrastructure for future use into County projects.

Policy 3.B.1. Communication projects shall be added to the County Comprehensive Capital Facilities Plan for consideration through the established process for prioritization and funding.

Policy 3.B.2. The County shall consider communications conduit as a standard aspect of a street and shall take advantage of opportunities to install infrastructure when appropriate.

   Action 3.B.2.a. Conduit shall be incorporated in the design and cost estimate phases of new street, sidewalk, or other related transportation projects.

   Action 3.B.2.b. Establish dedicated revenue account(s) to be funded through leases or rents of County property for communications infrastructure, and to be made available for future conduit development and maintenance projects.

   Action 3.B.2.c. When funding is not available for conduit, look for alternative sources including grants, special districts, public-private partnerships, private funding, or improvement district(s) in advance of actual construction effort.

Objective 3.C. Evaluate opportunities and establish a plan for future communications infrastructure needs and development opportunities.

Policy 3.C.1. Utilize existing committees, such as the Collaborative Planning Team, to coordinate and review communication development projects in neighboring jurisdictions or with a regional perspective.

   Action 3.C.1.a. Work to develop a common set of standards and protocols for permitting, design, etc. that ensure consistency for providers and ensure the best delivery of service to our constituents.

   Action 3.C.1.b. Evaluate Capital Improvement Plans (CIPs) for potential integration of broadband/communication projects.

Policy 3.C.2. Work with the private sector to identify future projects.

   Action 3.C.2.a. Work with cellular providers and third party tower developers to gain an understanding of future development intentions.

Objective 3.D. Develop and maintain a comprehensive inventory of communications, and related infrastructure for planning purposes.
Policy 3.D.1. The County shall establish and maintain a GIS database containing information and data on existing infrastructure. (Basic infrastructure information is also located in the Master Environmental Assessment [MEA]).

Action 3.D.1.a. Develop and maintain an inventory of communication infrastructure, capacity, and relevant characteristics for underground conduit, cell tower sites, and other facilities, with a focus on County properties and rights-of-way.

Action 3.D.1.b. Develop and maintain a list of priority “unserved” and “underserved” areas throughout Mono County in need of broadband and engage Last-Mile Providers with the intent of developing projects in those areas.

Action 3.D.1.c. Develop and maintain an inventory of cell phone coverage gaps, shadow areas, and potential locations (when/if identified).


Action 3.D.1.e. Acquire maps, data, and other relevant information from special districts and service districts throughout the County who provide service to local residents.

Action 3.D.1.f. Inventory and develop a publicly accessible dataset that contains the best known locations for infrastructure that may be used by future providers, as well as public sites anticipated to be problematic.

Objective 3.E. Improve and expand the communications network to meet critical public needs, improve government services, and support vibrant communities and local economies.

Policy 3.E.1. Leverage Digital 395 and other broadband and communications resources to improve public safety.

Action 3.E.1.a. Implement an Emergency Services Network using Digital 395 that connects the satellite facilities of emergency services personnel within Mono County, as well as surrounding jurisdictions with the intent of improving the exchange of information between all parties.

Action 3.E.1.b. Utilize the Emergency Services Network to improve Enhanced 911 services by coordinating information shared between dispatch and responders.
**Policy 3.E.2.** Improve cellular coverage area and establish redundant communications in communities.

**Action 3.E.2.a.** Direct future providers to key transportation corridors and community areas without cellular service due to coverage gaps or shadow areas. (See Action 3.D.1.c.)

**Policy 3.E.3.** Utilize Digital 395 and technology as a whole to improve government accountability and accessibility, improve efficiency, and reduce environmental and fiscal impacts.

**Action 3.E.3.a.** Develop and/or promote use of video conferencing, virtual meetings, a ride-share program, and other methods to reduce trips between County offices and to non-County locations.

**Action 3.E.3.b.** Budget for, install, and make available video conferencing equipment at County locations, such as community centers, libraries, and satellite offices.

**Action 3.E.3.c.** Utilize mobile data terminals or other similar computing devices to provide service to customers in the field.

**Action 3.E.3.d.** Explore and utilize paperless approaches for meetings, public information, and publication of reports, etc.

**Action 3.E.3.e.** Develop policies and guidelines for County staff to work remotely or telecommute when appropriate.

**Action 3.E.3.f.** Utilize the Internet, including websites, emails, and other similar communication vehicles to disseminate information to constituents and the general public.

**Action 3.E.3.g.** Provide access to public meetings via the Internet, "Public, Education, and Government (PEG) Access Channels", or other similar communication vehicles.

**Policy 3.E.4.** Develop a broadband economic development strategy for Mono County.

**Action 3.E.4.a.** Develop information and products including marketing collateral, white papers, case studies, and other relevant materials that can assist with the promotion of technology-focused business in Mono County.
Action 3.E.4.b. Develop a strategic outreach and marketing plan utilizing the developed materials and targeting technology focused businesses.

Action 3.E.4.c. Promote telecommuting as a viable method allowing visitors to stay in the region longer and work remotely, and attract new permanent residents to relocate to the area and work from Mono County.

Action 3.E.4.d. Promote workforce development and educational opportunities to train local residents and stakeholders about benefits and uses of technology, focused on the expansion of existing business and development of new business ventures.

Action 3.E.4.e. Utilize the broadband network to attract new businesses and promote business development.


Action 3.E.5.a. Evaluate locations in the County that would be viable for various types and sizes of new technology businesses.

Action 3.E.5.b. Evaluate issues, opportunities, and constraints pertaining to business development in various locations of the County.

Action 3.E.5.c. Consider changes to policies that may hinder or otherwise complicate development of technology or green business development, including waiving of permit or licensing fees.

Action 3.E.5.d. Evaluate broadband adoption and digital literacy programs and initiatives to support business retention and expansion.

Objective 3.F. Build support and funding for improving and expanding the communication infrastructure system through collaboration.

Policy 3.F.1. Support programs and initiatives that improve broadband adoption and digital literacy.

Action 3.F.1.a. Work with regional broadband consortia, state and national initiatives, and local service providers to offer broadband to low-income, at-risk, and under-/un- served populations.
Policy 3.F.2. Leverage and support the California Broadband Cooperative, Eastern Sierra Connect Regional Broadband Consortium, and other similar not-for-profit broadband organizations to help achieve County goals and objectives.

Action 3.F.2.a. Maintain a County seat on the Eastern Sierra Connect Regional Broadband Consortium and maintain the County’s interest in regional broadband development and adoption programs.

Action 3.F.2.b. Appoint a non-elected representative to the Board of Directors for the California Broadband Cooperative.

Policy 3.F.3. Seek grants and other funding opportunities for communication infrastructure projects consistent with these General Plan Policies.
3. Sample Development Standards

DEVELOPMENT STANDARDS

Q1: Chapter 11 – Utilities

Sections:

11.010 Placement of Utility Infrastructure
11.020 Alternative Energy Systems

11.010 Placement of Utility Infrastructure.
A. Exemption for Regulated Public Utilities.
   The provisions of this section shall not apply to distribution and transmission lines owned
   and operated as part of the statewide electrical network regulated by the California Public
   Utilities Commission (PUC). The authority for this exemption is set forth in the California
   Constitution, Article XII, Section 8, which vests exclusive regulatory authority over the
   distribution and transmission lines of these utilities in the California Public Utilities
   Commission. However, the County shall work with the PUC and applicant to cooperatively
   meet the standards set forth in Section F.

B. Uses Permitted.
   Underground facilities for the distribution of gas, water, sewer, telephone, television,
   communications and electricity shall be allowed in all designations.

C. Definitions.
   For the purposes of this section, the following definitions shall apply:

"Individual development" means an individual development project, such as a single-family
residence and/or Accessory Dwelling Unit, a garage, a single commercial use, one
apartment building, or similar uses. It does not mean a subdivision, land division,
condominium development, or development of more than one detached unit at the same
time.

"Overhead utility lines" means utility distribution lines and service laterals that are installed
above ground, either overhead, in an above ground conduit, or in some other manner.
"Subdivision" means the division of any unit or units of improved or unimproved land as further defined in Section 02.1520 and the Mono County Subdivision Ordinance.

"Utility" means gas, water, sewer, telephone, television, communications and electricity.

"Wireline" is a general term that is used to describe a connection to the Internet which is provided via hardwire, as in the case of DSL, Cable, or Fiber based technologies.

D. Utility Distribution Lines to Individual Development.
Utility distribution lines to an individual development shall be installed underground, unless the applicant has obtained a Director Review Permit with Notice for overhead installation, in the manner specified in Chapter 31, Director Review Processing. For projects that require a use permit, the application for overhead utility lines shall be processed as part of the use permit application.

Prior to considering issuance of a permit, planning staff shall work with the applicant to site and design the project in a manner that avoids or minimizes the use of overhead lines, and that avoids or minimizes the impacts of overhead lines. Consideration should be given to combining lines and co-locating with other applicable facilities whenever possible.

In granting a permit for overhead utility lines, the Community Development Director (Director) or the Planning Commission (Commission) shall make one of the following findings, in addition to the required Director Review or Use Permit findings:

1. The overhead line placement will not significantly disrupt the visual character of the area. In making this determination, the Director or the Commission shall consider the following:

   a. In areas without a number of existing overhead lines in the immediate vicinity, would overhead lines create the potential for a significant cumulative visual impact; i.e., would allowing an overhead line be likely to result in future requests for additional overhead lines in the area? If so, it may be determined that an overhead line will have a significant impact on the visual character of the area.
b. Does the topography or vegetation in the area effectively screen the proposed lines? If so, then an additional line may not significantly disrupt the visual character of the area.

c. Are there other potential alignments that would have less visual impact?

d. Does the project reduce the overall number of overhead lines and poles in the area; are the lines co-located with existing facilities; and/or do design features such as height of lines, size, color, reflectivity, tension in line, or other features reduce visual impacts? If so, it may be determined that an overhead line will not have a significant impact on the visual character of the area.

The Director or the Commission may consider additional information pertaining to the visual character of the area which is deemed relevant to the application.

2. The placement of utility lines above ground is environmentally preferable to underground placement. In making this determination, the Director or the Commission shall consider the following:

a. Will underground placement disturb an environmentally sensitive area, including but not limited to the following: cultural resource sites, significant wildlife habitat or use areas, riparian or wetland areas, or shallow groundwater? If so, above-ground placement may be preferable.

b. Will overhead placement cause impacts to sensitive species, such as the Bi-State Distinct Population Segment of Greater Sage-Grouse, or other environmental impacts? If so, above-ground placement may not be preferable, or perch deterrents and other mitigations may be required (see sage-grouse policies in C/OS).

c. Will underground placement require disturbance of a waterway, including perennial, intermittent and seasonal streams? If so, above-ground placement may be preferable.

d. Will underground placement increase the utility line's exposure to environmental hazards, such as flood hazards, fault hazards or liquefaction? If so, above-ground placement may be preferable.
e. Are there other potential alignments that would avoid potential environmental impacts?

The Director or the Commission may consider additional information pertaining to the environmental sensitivity of the area which is deemed relevant to the application.

3. The installation of underground utilities would create an unreasonable financial hardship on the applicant due to the unique physical characteristics of the property. In making this determination, the Director or the Commission shall consider the following:

a. Is the cost of the line to be installed excessive?

b. Will the installation of underground utilities require trenching under a stream bed?

c. Will the installation of underground utilities require unreasonable trenching or blasting through rock?

d. Are there alternate alignments that would eliminate or significantly lessen the financial hardship?

The Director or the Commission may consider other site specific financial hardships deemed relevant to the application.

4. The exclusive purpose of the overhead line is to serve an agricultural operation.

For the purposes of this section, agricultural operations are defined as use of the land for the production of food and fiber, including the growing of crops and grazing of livestock. Above-ground utility lines may be permitted for agricultural uses such as pumps and similar uses.

E. Utility Distribution Lines for Subdivisions.

Utility distribution lines for all subdivisions and land divisions shall be installed underground, unless a specific hardship can be demonstrated (see # 3 above). If a specific hardship can be demonstrated, overhead installation may be allowed subject to approval of a variance (see Ch. 33, Variance Processing).
Subdivisions may be required to underground the feeder distribution line to the subdivision. An assessment district, or a similar mechanism, may be established for this purpose as a condition of the tract map approval.

F. Utility Distribution Lines for All Other Communication Infrastructure
All other types of utility distribution lines shall be installed underground, unless the applicant has obtained a Director Review Permit with Notice for overhead installation, in the manner specified in Chapter 31, Director Review Processing. For projects that require a use permit, the application for overhead utility lines shall be processed as part of the use permit application. Projects located in the County right-of-way shall also require an encroachment permit from the Public Works Department.

Prior to considering issuance of a permit, planning staff shall work with the applicant to site and design the project in a manner that avoids or minimizes the use of overhead lines, and that avoids or minimizes the impacts of overhead lines. Consideration should be given to combining lines and co-locating with other applicable facilities whenever possible. If overhead installation is necessary, all of the findings in Section 11.010D 1-4 shall be evaluated to provide justification. In addition, the following requirements shall be applied:

1. Within Scenic Highway corridors, a variance (see Ch. 33, Variance Processing) and/or deviation authorization from the California PUC is required prior to approval of overhead construction.

2. In County rights-of-way other than Scenic Highway corridors, a use permit must be obtained prior to allowing overhead construction.

G. Use Permit.
Other utility (municipal, private, and if applicable, public utilities not regulated by the PUC) distribution lines, transmission lines and corridors, towers, electrical substations, repeater stations, pumping stations, and uses accessory thereto, including microwave facilities, may be allowed in all districts subject to first securing a use permit, in the manner specified in Chapter 32, Use Permit Processing.

H. Exceptions.
In the event that any regulations of the Public Utilities Commission or any other agency of the state with jurisdiction over utilities conflicts with the provisions of land use designations and the land development regulations, the regulations of the state shall apply, to the extent that the same are conflicting.
I. Locational Requirements.
Whether or not a utility is subject to any permitting requirements as delineated in subsections A to G, above, all new utility distribution lines, transmission lines, corridors, rights of way, towers, electrical substations, repeater stations, pumping stations, cell/communication towers and uses accessory thereto, including microwave facilities, shall comply with the policies of this General Plan and applicable area or specific plans.

J. Cellular and Wireless Towers

Towers erected for the purposes of providing communications through wireless or cellular technologies are permitted in all land use designations subject to a use permit. These towers shall exhibit substantial compliance with the following, unless such substantial compliance would result in an effective prohibition of the provision of wireless communication facilities, or in unreasonable discrimination against a provider of wireless communication facilities, as defined in the Telecommunications Act of 1996:


2. Cellular and wireless towers shall bond for the reclamation of the site in the event that the infrastructure has not been utilized for a period of three years. Infrastructure shall be removed within one year of abandonment.

3. Towers shall be sited only when there is an identified service provider who has proved a need for the facility.

4. Facilities shall be co-located to minimize the number of towers, and new sites shall include capacity for additional providers to utilize the facility.

5. New sites shall reference the County's inventory of shadow areas and coverage gaps, when available, and provide coverage maps/data demonstrating a reduction in areas without coverage.

6. Height shall be mitigated by locating towers on high ground but below ridgelines or hill tops. Heights greater than 60' may be allowed in Public Facilities (PF) Land Use Designations subject to the following use permit finding, but in no case shall the height exceed 80':
   a. The additional height shall not result in substantial detrimental effects on the enjoyment and use of surrounding properties.
In addition, at least one of the two following findings must be made in the use permit, and in no case shall additional height be granted above the minimum necessary to provide for the finding:

b. The increased tower height is necessary to provide line-of-sight and service coverage that significantly reduces shadow areas and coverage gaps as demonstrated by coverage maps/data, and/or

c. The increased tower height is necessary to support multiple carriers on one tower with adequate line-of-sight and service coverage as demonstrated by coverage maps/data.

7. Perch deterrents and other sensitive species mitigations shall be required consistent with C/OS policies.

8. Cell tower operators shall be required to verify compliance with the FCC’s RF Emission Standards.

K. Installation of Conduit and Wireline Infrastructure

Conduit and wireline for the purposes of providing communications infrastructure are permitted in all land use designations, and shall be installed underground and co-located with existing facilities or utilize existing wireline unless a Director Review Permit or Use Permit has been obtained. Projects located in the County right-of-way shall also require an encroachment permit from the Public Works Department. New conduit and wireline infrastructure shall be subject to the following requirements in addition to the applicable permit:

1. Evidence of need for new conduit or wireline infrastructure shall be demonstrated. Applicants should reference the County’s communication infrastructure database, when available.

2. New conduit in the County right-of-way shall contain tracer wire, or be mapped with GPS, or have accurate georeferenced as-built digital drawings, or be otherwise locatable using standard devices or means. Data must be submitted to the County at completion of construction.

3. New wireline infrastructure shall be placed in existing underground conduit before installing new conduit or overhead lines. Overhead lines shall be subject to Section F.
4. All new, large-scale, commercial underground infrastructure shall be filed with the Underground Service Alert (USA).

5. Sites shall be reclaimed and all infrastructure removed within 180 days of abandonment or cessation of use.

L. Commercial Communication Infrastructure on Private Property
A Director Review Permit (Ch. 31, Director Review Processing) must be secured prior to locating commercial communication infrastructure on private property for reasons other than personal consumption by the property residents.
4. Sample Infrastructure Improvement Ordinance

ORDINANCE NO. __________

ORDINANCE ADDING CHAPTER 12.25 TO SANTA CRUZ COUNTY CODE
RELATING TO TELECOMMUNICATIONS INFRASTRUCTURE IMPROVEMENTS

The Board of Supervisors of the County of Santa Cruz ordains as follows:

SECTION I

Chapter 12.25 of the Santa Cruz County Code is enacted to read as follows:

TELECOMMUNICATIONS INFRASTRUCTURE IMPROVEMENT ORDINANCE

Sections:
12.25.010 Purpose and Findings.
12.25.015 Definitions.
12.25.020 Telecommunications Infrastructure Improvement.
12.25.025 Implementation.
12.25.030 Exemptions.
12.25.035 Enforcement.
12.25.040 Violations.
12.25.045 Severability.
12.25.050 Effective Date.
12.25.055 No Conflict with Federal or State Law.
12.25.060 Preemption.

12.25.010 Findings and intent.
A. It is the intent of the County of Santa Cruz, in enacting Chapter 12.25, to streamline and simplify the process of installing and upgrading telecommunications equipment throughout the County, and to encourage improvement and modernization of telecommunications infrastructure.

B. Access to modern telecommunications infrastructure is vital for communication, education and economic development.

C. It is the desire of the County to foster a fair and level playing field for all market competitors that does not disadvantage or advantage one service provider or technology over another.

D. The County seeks to promote widespread access to the most technologically advanced telecommunications services for all County residents and businesses in a nondiscriminatory manner regardless of socioeconomic status.

E. It is the responsibility of the County to protect and control access to public rights-of-way.

F. The County has a duty to ensure that all service providers utilizing County property, facilities or rights-of-way comply with all applicable state and local health, safety and other laws.
G. It is consistent with the County's goals and values to encourage investment in telecommunications infrastructure to help close the digital divide.

H. It is necessary to update County policies and practices to recognize the authority of the California Public Utilities Commission as established in state and federal statutes.

I. It is the desire of the County to assess fees sufficient to recover the actual costs of providing services but not to discourage improvement of necessary infrastructure.

12.25.015 Definitions.
A. For the purposes of this Chapter, the following definitions apply:
1. "Telecommunications" refers to data, voice, video or other information provided by wire, fiber optic cable or other technology.

2. "Facilities" and "infrastructure" refers to wires, cables, conduit, switches, transmission equipment or other equipment for use in transmitting or processing telecommunications services or for providing support or connection to such equipment.

3. "Rights-of-way" refers to the area upon or adjacent to any County-owned road, highway or rail line or along or across any of the waters or lands owned or controlled by the County.

4. "Service providers" refers to any person, company, corporation or other entity providing data, voice, cable, video or other information services by wire, fiber optic cable or other technology.

5. "Excavation" refers to any process which removes material from the ground through digging, drilling, boring or other activity for the purpose of installing utilities, infrastructure or other structures or equipment.

6. "Conduit" refers to a tube, duct or other device or structure designed for enclosing telecommunication wires or cables.

7. "Reconstruction" refers to any project which repairs or replaces fifty percent or more of an existing road, highway or rail line.

12.25.020 Telecommunications Infrastructure Improvement
In recognition of the need to provide local residents and businesses within the community with the infrastructure required to meet their telecommunications needs, all construction, reconstruction or repaving of a County right-of-way will include provisions for the installation of telecommunications cable, conduit and other related equipment wherever practical and feasible. Where appropriate, telecommunications infrastructure shall be installed in or adjacent to County rights-of-way in conformance with current County standards. County staff will work with contractors to identify most cost-effective approach consistent with County requirements. If a project includes excavation in or adjacent to a County right-of-way, installation of or upgrades to telecommunications cable, conduit or other infrastructure will be included as needed. All installations shall conform to the size, shape, location and other specifications as determined by the Director of Public Works.
12.25.025 Implementation.
No less than 60 days before this ordinance takes effect, the County of Santa Cruz shall e-mail, fax, mail or deliver a copy of it to all telecommunications service providers and other affected entities doing business within the unincorporated County of Santa Cruz.

12.25.030 Exemptions.
A. The Director of Public Works, or the director’s designee, may exempt projects from the requirements of this chapter where compliance is found to be not practical or feasible. Requests for an exemption shall be in writing, and the Director’s or the director’s designee’s decision shall be final.
B. An exemption application shall include all information necessary for the Director of Public Works or the director’s designee to make a decision, including but not limited to documentation showing factual support for the requested exemption.
C. The Director of Public Works or director’s designee may approve the exemption application in whole or in part, with or without conditions.

12.25.035 Enforcement.
Enforcement of this ordinance shall be as follows:
A. The Director of Public Works, or designee, shall have primary responsibility for enforcement of this ordinance and shall have authority to issue citations for violation of this chapter. The Director, or designee, is authorized to establish regulations or administrative procedures to ensure compliance with this chapter.
B. A person or entity violating or failing to comply with any of the requirements of this chapter shall be guilty of an infraction.
C. The County of Santa Cruz may seek legal, injunctive, or any other relief to enforce the provisions of this chapter and any regulation or administrative procedure authorized by it.
D. The remedies and penalties provided in this chapter are cumulative and not exclusive of one another.
E. The Director of Public Works or designee may inspect the premises of any construction, reconstruction, repaving or excavation project to verify compliance with this ordinance.

12.25.040 Violations.
Violations of this ordinance shall be enforced as follows:
Violation of this chapter is hereby declared to be a public nuisance. Any violation described in the preceding paragraph shall be subject to abatement by the County of Santa Cruz, as well as any other remedies that may be permitted by law for public nuisances, and may be enforced by injunction, upon a showing of violation.

12.25.045 Severability.
If any word, phrase, sentence, part, section, subsection, or other portion of this chapter, or any application thereof to any person or circumstance is declared void, unconstitutional, or invalid for any reason, then such word, phrase, sentence, part, section, subsection, or other portion, or the proscribed application thereof, shall be severable, and the remaining provisions of this chapter, and all applications thereof, not having been declared void, unconstitutional or invalid, shall remain in full force and effect. The County of Santa

3
Cruz hereby declares that it would have passed this title, and each section, subsection, sentence, clause, and phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases had been declared invalid or unconstitutional.

12.25.050 Effective Date.
This ordinance shall become effective three (3) months after the date of final passage by the County of Santa Cruz Board of Supervisors.

12.25.055 No Conflict with Federal or State Law.
Nothing in this ordinance shall be interpreted or applied so as to create any requirement, power, or duty in conflict with any Federal or State law.

12.25.060 Preemption.
The provisions of this chapter shall be null and void if State or Federal legislation, or administrative regulation, takes effect with the same or substantially similar provisions as contained in this chapter. The Board of Supervisors shall determine whether or not identical or substantially similar statewide legislation has been enacted or regulations issued.

SECTION II

This ordinance shall take effect and be in force six months from the date of adoption.

PASSED AND ADOPTED this _______ of ________, 20____, by the Board of Supervisors of the County of Santa Cruz by the following vote:

AYES: SUPERVISORS
NOES: SUPERVISORS
ABSENT: SUPERVISORS
ABSTAIN: SUPERVISORS

________________________
Chairperson of the Board of Supervisors

Attest:
Clerk of the Board

APPROVED AS TO FORM:

________________________
Office of County Counsel
5. Sample Joint Trenching Agreement

EXHIBIT D

JOINT TRENCH AGREEMENT

THIS JOINT BUILD AGREEMENT ("Agreement"), effective the ___ day of _______ 200__, is made by and between ______________________, a __________ corporation with an office at __________________________ ("Lead Company"), and ______________________, a __________ corporation with an office at __________________________ ("Participant").

WHEREAS, each party intends to install, construct, own and operate underground conduit facilities ("Facilities") in connection with each party's respective operations; and

WHEREAS, to minimize the costs of constructing separate trenches and Facilities, the parties are willing to jointly construct such trenches and Facilities and to share the costs of such construction in accordance with the terms and conditions set forth herein;

NOW, THEREFORE, in consideration of the mutual covenants, terms, conditions and obligations contained herein, and intending to be legally bound hereby, the parties hereby agree as follows:

1. **Certain Definitions.** For purposes of this Agreement, the following terms are defined as follows. This is not intended as an exhaustive list of all defined terms used in this Agreement.

   (i) "Acceptance Testing" shall have the meaning attributed to it in Section 4(F).

   (ii) "Access Point" shall mean an opening, individually owned by a particular party, in the Joint Build by which the party may enter for the purpose of installing and maintaining Facilities (i.e. manhole or handhole).

   (iii) "Affiliate" shall mean any Person controlling, controlled by, or under common control with another Person.

   (iv) "Authorizations" shall have the meaning attributed to it in Section 3.

   (v) "Completion Notice" shall have the meaning attributed to it in Section 4(F).

   (vi) "Conduit" shall mean a structure containing one or more Innerducts.

   (vii) "Innerduct" shall mean a single enclosed raceway acceptable for communications cables.

   (viii) "Drawings" shall have the meaning attributed to it in Section 4(A).

   (ix) "Facilities" shall mean Innerducts, Conduits, Access Points and associated equipment, devices and hardware that are supplied by, or installed or designed for, a particular party.

   (x) "Governmental Authority" shall mean any federal, state or local government, or any agency or instrumentality thereof, having competent jurisdiction over the Facilities, the Joint Build or the parties hereto.
EXHIBIT D

(xi) "Joint Build" shall mean a trench and any combination of poles, Ducts, Conduits, Access Points, manholes, vaults and other Facilities to be constructed hereunder pursuant to the Scope of Work.

(xii) "Lead Company" shall mean the party who is responsible for managing the Work for the Joint Build.

(xiii) "Participant" shall mean a party other than Lead Company who is responsible for paying its portion of the Project Costs in consideration for its participation in the Joint Build and ownership rights in a certain defined portion of said Joint Build.

(xiv) "Person" shall mean an individual, association, partnership, corporation, or other legally recognized entity.

(xv) "Project Costs" shall mean all labor, transportation, supervision, materials and other direct costs associated with the Work relating to the Joint Build, other than the costs which will be borne entirely by one party pursuant to this Agreement or the Scope of Work.

(xvi) "Scope of Work" means the written description of the Work and the respective responsibilities of Lead Company and Participant. The Scope of Work as specified on Exhibit A is incorporated herein and becomes, upon execution by the parties hereto, a part of this Agreement.

(xvii) "Specifications" shall have the meaning attributed to it in Section 4(F).

(xviii) "Work" shall mean all necessary installation, management, engineering, placement, make-ready and preparatory work required for the construction of the Joint Build.

2. Order of Precedence of Contract Documents. In the event of a conflict or inconsistency between this Agreement and the terms set forth in the Scope of Work, the terms of the Scope of Work shall prevail.

3. Governmental Authorities. Each party agrees to comply with all applicable laws, rules, and regulations relating to the installation, maintenance and use of its Facilities. Each party will file the necessary applications and take all further action required in order to obtain, prior to the commencement of construction under the Scope of Work, all rights, easements, licenses, permits, approvals, agreements and other authorizations required by any Governmental Authority and any other third party agreements necessary to complete the Work contemplated by this Agreement and to occupy and use the right-of-way occupied by the Facilities constructed hereunder (collectively "Authorizations"). Each party shall provide written evidence of such Authorizations to the other party upon request.

4. Prosecution of Work

(A) Approval of Drawings and Costs; Execution of Scope of Work. Prior to the commencement of Work on the Joint Build, Lead Company shall provide Participant with a copy of the engineering drawings it intends to use when it commences the Work ("Drawings") and the cost breakdown of Participant’s share of the Project Costs. Participant shall have twenty (20) business days after receipt of the Drawings and the cost breakdown to either accept or reject the Drawings or the cost breakdown by delivery of a written notice (reasonably detailed, in the case of a rejection) to Lead Company. In the event Participant rejects the Drawings or the cost breakdown, Lead Company shall
EXHIBIT D

promptly resolve any objection or deficiency to the reasonable satisfaction of Participant. If the parties cannot reach an agreement on the Drawings or the cost breakdown, Participant may terminate this Agreement as provided in Section 14, whereupon Participant shall reimburse Lead Company for the reasonable costs it incurred that arose out of Participant’s agreement to participate in the Joint Build. If Participant fails to reject the Drawings or the cost breakdown within such twenty (20) day period, the Drawings and the cost breakdown shall be deemed acceptable by Participant and Lead Company shall proceed with the Work. Within thirty (30) days after Participant’s acceptance of the Drawings and the cost breakdown, Lead Company shall prepare the Scope of Work, which Lead Company and Participant shall execute within ten (10) days thereafter.

(B) Management of the Work. Upon acceptance of the Drawings, Lead Company shall be responsible for all Work thereunder, including the hiring and management of any contractor and subcontractors and the acquisition of all required construction permits. Lead Company shall provide Participant with a copy of all construction permits it obtains. Lead Company shall perform such Work in a good and workmanlike manner and in accordance with the specifications of this Agreement, the Scope of Work, the Occupational Safety and Health Act, the National Electrical Safety Code, the National Electrical Code, applicable industry standards, and laws and regulations of applicable Governmental Authorities. Lead Company and Participant shall timely pay each invoice it receives from Lead Company’s contractor, subcontractors and material suppliers who supplied the labor and/or materials for the Work. Furthermore, Participant shall reimburse Lead Company for all costs of removing any liens placed on the Joint Build (including reasonable attorneys’ fees and costs) which arise from non-payment or late payment to subcontractors or suppliers due to failure of Participant to make timely payments hereunder. Lead Company shall be solely responsible for removing any liens which arise from its failure to make timely payments in any other instance. Upon the commencement of the Work, Lead Company shall designate an authorized representative in connection with the Work, and shall prepare and provide to Participant a construction schedule and progress report from time-to-time, but not less than once every thirty (30) days. Participant shall have the right, but not the obligation, to inspect the Work from time-to-time prior to its completion, subject to the restrictions and consent of any Governmental Authority or other third party which owns or controls the real property rights-of-way upon which the relevant portion of the Joint Build is constructed.

(C) Project Costs. The Project Costs will be shared by the parties in the manner set forth in the Scope of Work.

(D) Management Fee. Participant shall pay to Lead Company a fee in the amount of ___% of Participant’s share of Project Costs to cover Lead Company’s costs for managing and supervising the Work for the Joint Build in accordance with the terms of the Scope of Work.

(E) Materials. Except as otherwise set forth in the Scope of Work (Exhibit A), each party shall arrange for the purchase and delivery of its materials required for the construction of the Joint Build as set forth in the Scope of Work. All materials supplied shall comply with the agreed upon specifications.

(F) Acceptance Testing. The Joint Build shall meet the technical specifications ("Specifications") set forth in Exhibit A, the Scope of Work. Upon completion of the Joint Build, Lead Company shall perform testing on the Joint Build to determine whether it complies with these Specifications ("Acceptance Testing"). Lead Company shall provide Participant with five (5) days prior written notice of the date and time of the Acceptance Testing and Participant shall have the right, but not the obligation, to be present for observation of the Acceptance Testing. When Lead Company reasonably determines that the Joint Build is installed and operating substantially in conformity with the
EXHIBIT D

Specifications set forth in the Scope of Work, Lead Company shall provide written notice of the same to Participant ("Completion Notice"). Upon receipt of a Completion Notice, Participant may inspect the Work performed by Lead Company and shall have thirty (30) days to either accept or reject the Completion Notice by delivery of written notice to Lead Company, specifying, if rejected, its grounds for such rejection. In the event Participant rejects the Completion Notice, Lead Company shall correct any such deficiencies on the Joint Trench Build as soon as practicable and a retest shall be performed. Upon completion of such retest, Lead Company shall provide another Completion Notice to Participant. The foregoing procedure shall apply again and successively thereafter until Lead Company has remedied all deficiencies in the Work. If Participant fails to reject a Completion Notice within the thirty (30) day period, the Work shall be deemed accepted by Participant, and Lead Company shall have no further liability related to Acceptance Testing of such Joint Build.

(G) Location of Joint Build. The specific location of the Joint Build shall be as designated in the Scope of Work (Exhibit A). Lead Company shall provide Participant with "as-builts" in a mutually acceptable electronic format that depict the construction and location of the Joint Build, within ninety (90) days after acceptance of the Completion Notice.

(H) Changes. In the event that a party seeks changes in, additions to, or deletions from the Work and/or the Scope of Work, the party seeking changes, additions or deletions shall promptly notify the other party in writing of (i) the proposed changes, additions or deletions; (ii) the estimated cost of the proposed changes, additions or deletions; (iii) the effect of the proposed changes, additions or deletions upon the scheduled completion of the Work; (iv) whether additional Authorizations are required as a result of the proposed changes, additions or deletions; and (v) the effect of the proposed changes, additions or deletions upon the other party’s share of Project Costs. If both parties agree to the proposed changes, additions or deletions, the Lead Company shall promptly proceed with the performance of the Work as so modified. The Project Costs and time for performance of the Work shall be equitably adjusted as necessary to reflect the impact of the agreed upon changes, additions or deletions on the Work and/or the Scope of Work.

5. Ownership. All Facilities installed and designated for Participant as set forth in the Scope of Work shall be and remain the property of the Lead Company; provided that upon the payment by Participant of its share of the Project Costs, said Facilities shall become the property of Participant. After acceptance of the Completion Notice, each party shall take all necessary precautions to protect the other party’s Facilities from any physical damage and to keep such Facilities in the same manner as such party protects its own Facilities.


(A) General. After completion and acceptance of the Joint Build, each party shall be responsible for performing (at its own cost) all maintenance and repairs of its Facilities. Such maintenance and repairs shall be performed in a good and workmanlike manner, in accordance with the specifications of this Agreement, the Scope of Work, the National Electrical Safety Code, the National Electrical Code, applicable industry standards, and regulations of applicable Governmental Authorities.

(B) Access. Subject to any limitations contained in the Scope of Work, each party shall have access to its Facilities on a 24-hours per day, 7-days per week basis as necessary for the proper maintenance and/or restoration thereof; provided, however, such access shall be coordinated with the other party. Before beginning any non-emergency, inspections or scheduled maintenance, each party shall give the other at least twenty-four (24) hours advance notice. Notwithstanding the foregoing, following acceptance, each party shall have unlimited access to its individually owned Access Points as
EXHIBIT D

designated in the Scope of Work, without the requirement of prior notice to the other party. If both parties require simultaneous access to the Joint Build, then the parties shall reasonably and equitably coordinate such access.

(C) **Emergency Maintenance.** Subject to any limitations contained in the Scope of Work, in the event of an emergency, each party shall have the right to perform maintenance and/or restoration of its Facilities and such party shall use its best efforts to notify the other party as soon as practicable of such efforts. If both parties require simultaneous access to the Joint Build, then the parties shall reasonably and equitably coordinate such access in a manner that will accommodate the needs of both parties.

(D) **Damages.** Each party shall indemnify and hold harmless the other party for any losses, costs or damages to such other party’s property (including, without limitation, its Facilities) arising from the indemnifying party’s negligence or intentional misconduct in its maintenance or restoration efforts.

7. **Relocation.** In the event that a Governmental Authority requires the transfer, rearrangement or relocation of any portion of the Joint Build, the parties shall each pay their pro rata share (proportionate to their percentage of ownership of the Joint Build or portion thereof to be relocated) for all reasonable costs of the transfer, rearrangement or relocation. The parties shall use their best efforts to identify an alternate location for the Joint Build. In the event the parties are unable to agree on a suitable alternate location for the Joint Build, then either party may terminate this Agreement with respect to such Joint Build (or portion thereof) and shall promptly remove its Facilities located therein.

8. **Representations and Warranties.** Each party represents and warrants that it has full right and authority, including any requisite corporate authority, to perform its respective obligations under this Agreement; the execution of this Agreement is not violative of its charter, by-laws or any law, regulation or agreement by which it is bound or to which it is subject; no litigation or governmental proceeding (other than the Authorizations required by any Governmental Authority to occupy and use the locations and rights-of-way for the Facilities constructed herein) is pending or threatened in writing which might have a material adverse effect on this Agreement, the transaction contemplated by this Agreement or the rights of the parties hereunder. Each party further warrants that it shall carry on its obligations hereunder in a professional and workmanlike manner. Except for the foregoing and except as otherwise provided in the Agreement, neither party makes any warranty to the other, and each party expressly disclaims all further warranties, including without limitation, the implied warranties or merchantability or fitness for purpose.

9. **Taxes.** Each party shall pay its pro rata share of any present or future taxes, fees, charges or assessments which Lead Company is required or obligated to pay by reason of the construction or ownership of the Joint Build or the installation, operation or maintenance of the Facilities. After acceptance, each party shall be responsible for any taxes imposed by a Governmental Authority relating to such party’s respective Facilities.

10. **Term.** This Agreement shall become effective as of the date written above and, if not earlier terminated in accordance with the provisions hereof, shall remain in effect until acceptance of the Completion Notice by Participant.

11. **Billing and Payment.** All undisputed amounts due Lead Company or its contractor under this Agreement shall be paid by Participant within forty-five (45) days following receipt of invoices.
EXHIBIT D

along with a detailed accounting of such amounts. If any undisputed amount is not paid within such period, Participant shall be required to pay a late charge of one and one-half percent (1 1/2%) per month times the amount unpaid or, if that late charge is unlawful, the maximum rate permitted by law. Participant must identify and explain in detail its dispute with any invoice item within forty-five (45) days of the receipt of such invoice. The parties shall proceed in an amicable manner to resolve such dispute for at least thirty (30) days, after which either party shall have the right to seek redress of such dispute by other legally available means. In no event shall either party be entitled to bill the other party more frequently than once each month for any amounts due under this Agreement. The foregoing payment provisions apply to any amounts Lead Company owes Participant pursuant to applicable provisions of this Agreement. With the final payment of its share of the Project Costs, Participant shall receive final lien waivers from all contractors and suppliers performing work and/or providing materials to the Joint Build. If the lien law applicable to the Joint Build or portion thereof provides for delivery of lien releases following payment, then Lead Company shall deliver same to Participant within two (2) business days after the time period for delivery required by such law.

(A) Payment Default. Undisputed amounts owed to Lead Company or Lead Company’s contractor not paid within forty-five (45) days of receipt of an invoice may be deemed in default (“Payment Default”) by Lead Company at its sole discretion, upon written notice to Participant. Any such Payment Default may, at Lead Company’s sole discretion, be grounds for termination of this Agreement by Lead Company. In case of such termination, Lead Company shall automatically assume ownership of all Joint Build property and materials, including, without limitation, any Facilities supplied by Participant, and Participant shall have no right of reimbursement, refund or compensation for such assumption whatsoever. Such right of assumption is in addition to, and in no way limits, Lead Company’s other available rights at law or in equity, arising from or related to the Payment Default by Participant.

(B) Costs. In the event of a Payment Default, and in addition to its rights set forth above, Lead Company and Lead Company’s contractor shall be entitled to recover from Participant its reasonable costs of collection, including reasonable attorneys’ fees and court costs.

12. Indemnification. Except to the extent such claims are caused by the negligence of a party indemnified hereunder, each party (“Indemnitor”) shall defend, indemnify and hold harmless the other party (“Indemnitee”) from and against and shall pay all losses, damages, liabilities, penalties, fines, assessments, claims and actions, and all related expenses (including reasonable attorneys’ fees and expenses and the costs of litigation) by reason of injury or death to any person, damage to any property or any other occurrence arising out of, resulting from or in any manner caused by or related to: (i) the negligence or intentional misconduct of the Indemnitor in the installation, maintenance, operation, presence, use or removal of any Facilities; (ii) infringement of copyright, libel, slander, or unauthorized use of information arising out of, resulting from or in any manner caused by the operation or use of Indemnitor’s Facilities; (iii) Indemnitor’s failure to secure necessary Authorizations from any applicable Governmental Authority and any necessary rights-of-way from owners of property; or (iv) infringement of patents with respect to the manufacture, use and operation of Indemnitor’s Facilities. Any party seeking indemnification hereunder (“Indemnitee”) shall promptly notify the other party (“Indemnitor”) of the nature and amount of such claim and the Indemnitee shall consult with the Indemnitor respecting the defense and satisfaction of such claim, including the selection of and direction to legal counsel, and the Indemnitee shall not pay or settle any such claim without the prior written consent of the Indemnitor, which consent shall not be unreasonably withheld. To the extent such limitation is legally enforceable, in no event shall either party be liable for any punitive, consequential, incidental, special damages or lost profits incurred or alleged to have been incurred by anyone.
EXHIBIT D

13. **Insurance.** During the term of this Agreement, each party shall obtain and maintain, and shall require any of its permitted subcontractors to obtain and maintain, the following insurance, naming the other party as an additional insured: (i) Commercial General Liability insurance with minimum limits of: $2,000,000 general aggregate limit; $1,000,000 each occurrence sub-limit for all bodily injury or property damage incurred in any one occurrence; $1,000,000 each occurrence sub-limit for personal injury and advertising; $2,000,000 products/completed operations aggregate limit, with a $1,000,000 each occurrence sub-limit for products/completed operations; (ii) worker's compensation insurance in amounts required by applicable law and employer's liability insurance with minimum limits of $100,000 for bodily injury each accident, $500,000 for bodily injury by disease-policy limits and $100,000 for bodily injury by disease each employee; (iii) automobile liability insurance covering death or injury to any person or persons, or damage to property arising from the operation of vehicles or equipment, with limits of not less than $1,000,000 combined single limits per occurrence, which coverage shall extend to all owned, hired and non-owned vehicles.

   (A) **Self-insurance.** Both parties expressly acknowledge that a party shall be deemed to be in compliance with the provisions of this Section if it maintains an approved self-insurance program providing for a retention of up to $ [insert dollar amount].

   (B) **Certificates.** Unless otherwise agreed, all insurance policies shall be obtained and maintained with companies rated B+ VII or better by Best's Key Rating Guide and each party shall, upon request, provide the other party with an insurance certificate confirming compliance with the requirements of this Section 13. Such certificates shall provide for thirty (30) days' advance written notice to the other party for any cancellation, material change, reduction of coverage or non-renewal.

   (C) **Liability.** The obtaining and maintaining of insurance coverage in accordance with this Section 13 shall not be construed as in any way limiting or eliminating a negligent (or intentionally wrongful) party's liability to indemnify the other party in accordance with the applicable provisions of this Agreement for losses suffered by such other party.

14. **Termination.** In the event a party fails to observe or perform any of the material terms and provisions of this Agreement and such failure continues for a period of thirty (30) days after written notice from the other party (or such longer period as may be necessary if such failure cannot reasonably be cured within such 30 day period, provided that such party promptly and diligently undertakes efforts to bring about such cure and thereafter proceeds, in good faith, to cure such failure; which in no event shall exceed sixty (60) days) ("Default"), the non-defaulting party may, in addition to any and all other remedies allowed by law, terminate this Agreement in its entirety. Upon termination of this Agreement for Default, Lead Company shall continue to complete the Work to a reasonable stopping point, and each party shall pay for its pro rata share of the Project Costs and management fees through the completion of such Work. The right of termination described in this provision is in addition to, and does not in any way limit or eliminate, the right of termination for a Payment Default as provided in Section 11 above.

15. **Condemnation.** Upon receipt of a formal notice of condemnation or other taking by eminent domain, each party shall notify the other party immediately of any such proceeding that is threatened or filed against any portion of the Joint Build. In the event and to the extent of any condemnation or other taking by eminent domain of all or any part of the Joint Build, or any property or rights relating thereto, then the proceeds thereof shall be apportioned on a pro rata basis as set forth in the Scope of Work.
EXHIBIT D

16. **Waiver of Compliance.** Failure of either party to enforce or insist upon compliance with any of the terms or conditions of this Agreement shall not constitute a waiver or relinquishment of any such terms or conditions. To the contrary, the same shall remain at all times in full force and effect.

17. **Limitations.** Except as set forth in this Agreement, nothing shall in any way restrict, modify, or alter either party’s absolute right to lease, sell, dispose of or utilize, in its sole discretion, its Facilities which are subject to this Agreement. The party leasing, selling or disposing of its Facilities shall either (i) include the maintenance and restoration language in paragraph 6 of this Agreement in any agreement to lease, sell or dispose of the Facilities or (ii) make such lease, sale or disposal specifically subject to such provisions.

18. **Assignment.** Neither Party may assign or otherwise transfer this Agreement or its duties and obligations contained in this Agreement without the prior written consent of the other, which consent shall not be unreasonably withheld or delayed; provided, however, neither party shall be required to obtain the consent of the other for any corporate reorganization, assignment or transfer of this Agreement or the rights herein granted to any Affiliate, any purchaser of all or substantially all of the assets of such party, or any person with which or into which such party may merge or consolidate. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective permitted successors and assigns.

19. **Sublease.** Nothing shall in any way restrict, modify, or alter either party’s right to lease, sublease, license, sell, dispose of or utilize, in its sole discretion, its Facilities which are subject to this Agreement. All sublessees and licensees shall use the Facilities in a manner consistent with this Agreement and the agreement between such party and the proposed subtenant or licensee (which agreement is hereinafter referred to as the "Lease", the said subtenant or licensee being hereinafter referred to as "Lessee") shall in all respects be subject to the terms and conditions of this Agreement. For purposes of this Agreement, all acts and omissions of the Lessee shall be deemed acts and omissions of the party who owns or controls such Facilities. Notwithstanding the foregoing, the rights of the parties to grant Leases shall be subject to the restrictions, contractual or otherwise, imposed by any Governmental Authority or other third party which owns or controls the real property rights of way upon which the relevant portion of the Joint Build is constructed.

20. **Notices.** All notices shall be in writing and shall be delivered by certified mail return receipt requested or any other generally accepted delivery system that is capable of providing proof of delivery. Any such notice shall be deemed effective on the date of receipt. All notices shall be addressed to the parties as specified below:

   If to ________: Address & Contact

   If to ________: Address & Contact

A party may change the above addresses to which notices are sent by giving written notice of such change to the other party in accordance with the provisions of this Section 20.

21. **Severability.** In the event that any term or provision of this Agreement is declared to be illegal, invalid or unconstitutional, then that provision shall be deemed to be deleted from this Agreement and have no force or effect and this Agreement shall thereafter continue in full force and effect, as modified.
EXHIBIT D

22. Confidentiality. Both parties hereby agree that if either party provides confidential or proprietary information to the other party (“Proprietary Information”), such Proprietary Information shall be held in confidence, and the receiving party shall afford such Proprietary Information the same care and protection as it affords generally to its own confidential and proprietary information (which in any case shall be not less than reasonable care) in order to avoid disclosure to or unauthorized use by any third party. The parties acknowledge and agree that all information disclosed by either party to the other in writing in connection with or pursuant to this Agreement shall be deemed to be Proprietary Information.

(A) All Proprietary Information, unless otherwise specified in writing, shall remain the property of the disclosing party, shall be used by the receiving party only for the intended purpose, and such written Proprietary Information, including all copies thereof, shall be returned to the disclosing party or destroyed after the receiving party’s need for it has expired or upon the request of the disclosing party. Proprietary Information shall not be reproduced except to the extent necessary to accomplish the purpose and intent of this Agreement, or as otherwise permitted in writing by the disclosing party.

(B) This provision shall not apply to any Proprietary Information which (i) becomes publicly available other than through the disclosing party; (ii) is required to be disclosed by a governmental or judicial law, order, rule or regulation; (iii) is independently developed by the receiving party; or (iv) becomes available to the receiving party without restriction from a third party.

(C) Either party may disclose Proprietary Information to its employees, agents, lenders, funding partners and legal and financial advisors and providers to the extent necessary or appropriate in connection with the negotiation or performance of this Agreement or in obtaining financing, provided that each such party is notified of the confidential and proprietary nature of such Proprietary Information and is subject to or agrees to be bound by similar restrictions on its use and disclosure.

(D) Neither party shall issue any public announcement or press release relating to the execution of this Agreement without the prior approval of the other party.

(E) In the event either party shall be required to disclose all or any part of this Agreement in, or attach all or any part of this Agreement to, any regulatory filing or statement, each party agrees to discuss and work cooperatively, in good faith, with the other party, to protect, to the extent possible, those items or matters that the other party deems confidential and that may, in accordance with applicable laws, be deleted therefrom. The confidentiality provisions of this Article shall survive expiration or termination of this Agreement.

23. Joint Work Product. This Agreement is the joint work product of the parties hereto; accordingly, in the event of ambiguity no presumption shall be imposed against any party by reason of document preparation.

24. Force Majeure. Neither party shall be liable to the other for any failure of performance under this Agreement due to causes beyond its control (except for the fulfillment of payment obligations as set forth herein), including, but not limited to: acts of God; fire, flood or other catastrophes; adverse weather conditions; material or facility shortages or unavailability not resulting from such party's failure to timely place orders therefor; lack of transportation; the imposition of any governmental codes, ordinances, laws, rules, regulations or restrictions; national emergencies; insurrections; riots, wars; or strikes, lock-outs, work stoppages or other labor difficulties; provided however, that the party unable to perform its obligations shall promptly notify the other party in writing of such delay and said time period shall be extended for only the actual amount of time said party is so delayed. An act or omission shall
EXHIBIT D

not be deemed to be "beyond its control" if committed, omitted or caused by such party, or its employees, officers, agents or affiliates, or by any corporation or other business entity that holds a controlling interest in said party, whether held directly or indirectly.

25. **Public Relations.** This Agreement shall not be construed as granting to either party the right to use any trademarks, service marks or trade names of the other party, or otherwise refer to the other party in any marketing, promotional or advertising materials or activities. Without limiting the generality of the foregoing, neither party shall disclose (i) the terms of this Agreement, (ii) the existence of a particular Joint Build or any contractual relationship between the parties, or (iii) issue any publication or press release relating directly or indirectly to (i) or (ii) above without the other party’s prior written consent.

26. **Dispute Resolution.**

(A) Any controversy or claim, whether based on contract, tort or other legal theory (including, but not limited to, any claim of fraud or misrepresentation) (“Claims”), arising out of or related to this Agreement, or any Scope of Work, or its breach shall be resolved in accordance with the dispute resolution procedure contained in this Section 26 and the then current rules of the American Arbitration Association, unless the parties agree in writing otherwise.

(B) The disputing party shall give written notice to the other party of any and all Claims as soon as possible after the event giving rise to such Claim. Pending the final resolution of any Claim, Lead Company shall continue to proceed with the performance of the contract in accordance with its terms pending resolution of the dispute. In such event, Participant shall continue to pay Lead Company in accordance with this Agreement for undisputed amounts.

(C) Either party may submit the matter to mediation with a professional mediation service selected by mutual agreement of the parties. Good faith mediation is a condition precedent to arbitration. Persons with authority to resolve the dispute shall be present at the mediation. Unless the parties agree otherwise, the mediation shall take place in the city in which the Facilities involved in the Claim are located. Such mediation shall be conducted in accordance with the Voluntary Construction Mediation Rules of the American Arbitration Association, unless the parties agree in writing otherwise.

(D) If the parties do not resolve the dispute through mediation or if 90 days have passed since the parties submitted the dispute to mediation and the parties are not in active negotiations, either party may submit the dispute to arbitration. If the parties cannot agree on an arbitration service, such service shall be provided pursuant to the American Arbitration Association Construction Industry Arbitration Rules. The award may be confirmed and enforced in any court of competent jurisdiction. Unless the parties agree otherwise, the arbitration shall occur in ____________, California.

(E) The parties shall each bear the expenses of their share of the dispute resolution process. The costs of mediation and arbitration, including the fees and expenses of the mediator and arbitrator, shall be paid equally by the parties. Each party shall bear the cost of preparing and presenting its case, including its own attorney fees, expert witness fees, and travel-related expenses.

(F) The parties agree that neither an arbitrator nor a judge shall have the power or authority to make any award that provides for punitive, exemplary or other types of damages that are waived or prohibited by this Agreement. The parties expressly waive all punitive damages and other damages waived in this Agreement.
EXHIBIT D

27. **Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the State of California, exclusive of its choice of law provisions.

28. **Survival.** Any and all provisions of this Agreement which, by their nature, would reasonably be expected to be complied with or performed after the expiration or termination of this Agreement, including, without limitation, the maintenance obligations set forth in Section 6 hereof, shall survive and be enforceable after the expiration or termination of this Agreement.

29. **Entire Agreement.** This Agreement and the Scope of Work contains the entire agreement between the parties and supersedes all prior oral or written agreements with respect to the subject matter hereof. This Agreement may not be amended or modified except by a written instrument executed by the parties hereto.

30. **No Partnership.** The parties acknowledge and agree that this Agreement does not create a partnership between, or a joint venture of, the parties.

31. **Counterparts.** This Agreement may be executed in one or more counterparts, each of which shall be deemed an original and all of which together shall constitute one agreement.

IN WITNESS WHEREOF, the parties hereto have caused their duly authorized officers to execute this Agreement as of the date set forth above.

<table>
<thead>
<tr>
<th>Company Name:</th>
<th>Company Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>By: ___________________________</td>
<td>By: ___________________________</td>
</tr>
<tr>
<td>(Print Name)</td>
<td>(Print Name)</td>
</tr>
<tr>
<td>Title: ___________________________</td>
<td>Title: ___________________________</td>
</tr>
<tr>
<td>Date Signed: ___________________________</td>
<td>Date Signed: ___________________________</td>
</tr>
</tbody>
</table>
EXHIBIT D

SCOPE OF WORK

____________________(Project Name)____________________

This Scope of Work is entered into this _____ day of ________, 20___, by and between
____________________ corporation (“___________”) and _______________, a
______________ corporation (“________________”) as an addendum to the Joint Build Agreement dated
_____________. Upon execution by the parties hereto, this Scope of Work shall be attached to and
become a part of the Joint Build Agreement. In the event of a conflict or inconsistency between this
Scope of Work and the terms set forth in the Joint Build Agreement, the terms of this Scope of Work
shall in all cases prevail. All capitalized terms not otherwise defined in this Scope of Work shall have
the meaning set forth in the Joint Build Agreement.

1. Project Description:

1.1 ______________ shall be Lead Company and ___________ shall be Participant
(hereinafter collectively “the Parties”).

1.2 The “Project” consists of engineering and construction of a Joint Build of approximately
________ linear feet, in the proposed route and (if applicable) consisting of the various
components thereof (such components being referred to herein as “Segments”), all as
described in Exhibit A hereto (“Route Description & Route Map”). Unless otherwise
agreed between the Parties, all underground Segments of the Project shall be constructed
in accordance with the trench detail set forth in the engineering/construction drawings
that (a) already have been completed and referenced in Exhibit A hereto and copies of
which have been provided to each Party and each Party acknowledges receipt thereof, or
(b) when completed and agreed to by the Parties, shall be provided to each Party. Lead
Company’s and Participant’s manholes/handholes will be placed along all underground
Segments of the Project in locations to be agreed upon between the Parties, which
locations shall be noted in the agreed upon engineering/construction drawings.
Manholes/handholes will be placed for each party as needed. Placement of fiber optic
cable is not included in this Scope of Work and each party is individually responsible for the
placement of fiber optic cables. Prior to installation, Lead Company and Participant
will agree to material specifications.

1.3 In the event that any investigation, site monitoring, containment, cleanup, removal,
restoration or other remedial work of any kind or nature is reasonably necessary or
desirable under any applicable local, State or governmental or non-governmental entity
or person because of, or in connection with the discovery of historical artifacts within the
Project; or the current or future presence, suspected presence, release or suspected
release of a hazardous substance in or into the air, soil, groundwater, surface water, soil,
at, on, about, under or within the Project (or any portion thereof), the Lead Company
shall immediately stop the Work and promptly inform Participant of the findings. Work
will not continue until a remedial plan has been agreed to in writing by Lead Company
and Participant.

1.4 Each Party acknowledges and agrees that the proposed route as set forth in Exhibit A
hereto is subject to a change due to Force Majeure as provided in the Agreement. When
any party discovers that such a change is required, such party will immediately notify the
EXHIBIT D

other party. Notwithstanding anything to the contrary contained in the Agreement, to the extent any such change is required to a particular Segment, immediately after becoming aware thereof, the Parties shall negotiate in good faith to reach agreement as to a mutually acceptable change to the affected Segment(s). If no agreement can be reached within thirty (30) days after the commencement of such negotiations, then at any time thereafter, unless and until the parties reach agreement on such change, either Party may terminate its participation in the affected Segment at a reasonable and mutually agreed upon physical point adjacent to such Segment or within such Segment and shall pay to the other non-terminating Party the terminating party’s share of all Project Costs incurred as of the date of such termination with respect to the terminated Segment, plus the terminating Party’s share of demolitionization and restoration costs incurred as a result of such termination.

1.5 Lead Company will provide field engineers to inspect the entire Project while under construction. Participant will be entitled to conduct field inspections where applicable. If Participant chooses to conduct field surveys, Participant must follow all safety regulations set by any Governmental Authority and all safety regulations set by the subcontracting company on site.

2. Construction Schedule:

2.1 Lead Company will complete construction of the Project with all work required to be performed under this Scope of Work by the dates set forth in Exhibit B (“Construction Schedule”). However, the Construction Schedule shall be suspended and extended to the extent necessary by reason of Force Majeure as provided in the Agreement, or by Paragraph 1.3 as set forth above in this Scope of Work. For purposes of this Paragraph, a “working” day shall be defined as Monday through Friday with the exception of recognized holidays.

2.2 At the start of the Project, Lead Company will notify Participant within 7 days of the project kick-off meeting so that Participant can arrange for an inspector to attend.

2.3 Lead Company shall provide Participant with an overall project schedule identifying critical path items (i.e. engineering, permitting and construction) every two weeks.

2.4 If by reason of Force Majeure as provided in the Agreement or Paragraph 1.3 in this Scope of Work, the date of completion set forth in the Construction Schedule will be delayed, or is reasonably likely to be delayed for more than thirty (30) days after such completion date, the Parties shall immediately after becoming aware thereof negotiate in good faith to reach agreement as to a mutually acceptable course of action to mitigate the impact of such delay on the Project. If no agreement can be reached within thirty (30) days after the commencement of such negotiations, then at any time thereafter, unless and until the parties reach agreement on such course of action, either Party may terminate this Scope of Work at a reasonable and mutually agreed upon point in time and location within the affected Segment(s) and pay to the non-terminating Party the terminating Party’s share of all Project Costs incurred as of the date of such termination, plus the terminating Party’s share of demolitionization and restoration costs incurred as a result of such termination.

3. Project Costs:
EXHIBIT D

3.1 Project costs shall be allocated and paid as set forth in Exhibit D (“Cost Sharing Basis”).

3.2 Estimated Project costs for each Party (including material costs) are as set forth in Exhibit E (“Estimated Costs”).

3.3 In the event that Participant fails to timely pay any amounts owed to Lead Company or Lead Company’s contractor under this Scope of Work, Lead Company shall retain ownership of Participant’s Conduit pursuant to Paragraph 5 of the Joint Build Agreement. Once Participant pays the amounts due under to this Scope of Work (plus the amounts due under a settlement agreed to by both parties in writing of disputed amounts, if applicable), Participant shall receive title to Participant’s Conduit.

3.4 In the event that Lead Company and Participant agree to allow additional party(ies) to participate in any Segment of the Project, the costs will be allocated among Participant, Lead Company and such other party(ies) in such manner as set forth in Exhibit D.

3.5 If at any time during the construction, circumstances arise that are beyond the control of either of the Parties that result in a cost increase of more than ten percent (10%) of the estimated Project Costs, the Parties shall confer and attempt in good faith to determine by mutual agreement whether to terminate construction or modify the construction plans. If no agreement can be reached, either party may terminate this Scope of Work at a reasonable and mutually agreed upon point. The terminating Party shall pay to the other Party the terminating Party’s share of all Project Costs incurred as of the date of such termination, plus the terminating Party’s share of demobilization and restoration costs incurred as a result of such termination.

4. Specifications:

4.1 Lead Company’s current (as of the date of this Scope of Work) Outside Plant Specifications, a copy of which has previously been provided to Participant, are incorporated herein by this reference and the Work performed hereunder shall be in compliance therewith, except to the extent such Specifications are modified by this Scope of Work as depicted in Exhibit C (“Supplemental Specifications”).

5. Points of Contact/Escalation Procedures:

<table>
<thead>
<tr>
<th>First Level</th>
<th>Lead Company</th>
<th>Participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second Level</td>
<td>--------------</td>
<td>-------------</td>
</tr>
</tbody>
</table>

IN WITNESS WHEREOF, the parties hereto have executed this Scope of Work on the day and year written above.
EXHIBIT D

By: ________________________________

Title: ______________________________

Date: ______________________________

By: ________________________________

Title: ______________________________

Date: ______________________________
EXHIBIT D

EXHIBIT A

To Scope of Work
______________________ (Name of Project) _______________________

ROUTE DESCRIPTION & ROUTE MAP

Route description to include Participant’s # and size of ducts, length of route, estimated # of manholes, manhole arrangement in the header.

Describe route with linear feet on each street, which is tied to Construction schedule.

Attach map

EXHIBIT D

EXHIBIT B
Scope of Work
(Name of Project)

CONSTRUCTION SCHEDULE

<table>
<thead>
<tr>
<th>Segment</th>
<th>Length (Miles)</th>
<th>Begin Construction</th>
<th>End Construction</th>
</tr>
</thead>
</table>
EXHIBIT D

EXHIBIT C
To Scope of Work
(Name of Project)

SUPPLEMENTAL SPECIFICATIONS

1. Lead Company shall ensure that Contractor will obtain all necessary permits before proceeding with construction.

2. Lead Company shall ensure that all manholes/handholes will be free of debris, adequately sealed, and covers shall be secured as required by their manufacturer.

3. Participant has arranged for delivery of its materials as follows:

4. Lead Company shall provide one (1) floppy disk or CD-ROM of as-builds in the current format utilized by the Lead Company for as-builds.

5. Manhole Specifications/Requirements

6. [IF APPLICABLE:] Lead Company shall ensure that Contractor warrants that all Work to be furnished under this Agreement shall conform in all respects to the requirements of the Agreement or this Scope of Work; are free from any defects in workmanship; and are free of defects causing caving or sinking of the trench or the paving for a period of two (2) years following acceptance of the Work.
### COST SHARING BASIS

This Exhibit sets forth the Cost Sharing Basis between the parties.

<table>
<thead>
<tr>
<th>TERM</th>
<th>DEFINITION</th>
<th>COMPENSATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Materials</strong></td>
<td>This line item includes all direct materials required for underground construction. Example materials include conduit, duct, duct plugs, manholes, handholes, innerduct, HDPE, and steel pipe (bridge attachments). Bridge attachment material will be prorated since a single hanger may be used for multiple conduits.</td>
<td>Each participant to pay 100% of the cost of all Materials used for its respective conduit system(s).</td>
</tr>
<tr>
<td><strong>Indirect Costs</strong></td>
<td>This line item includes all costs incurred by the Lead Company’s general contractor that are not Underground Labor and Common Materials as defined below. Examples of Indirect Costs include, but are not limited to, engineering, permitting, generation of as-buils, and inspection services.</td>
<td>Each participant to share equally in these costs based on the number of total participants for the total footage of participation.</td>
</tr>
<tr>
<td><strong>Underground Labor &amp; Common Materials</strong></td>
<td>This line item includes all direct labor to install Materials. Examples of labor that are part of this include trenching, boring, bridge attachments, placing conduit, restoration, manholes/handhole placement. Common materials include bore casings, bridge attachment hardware, trench tape, etc.</td>
<td>Each participant to pay percentage based on the Equity Cost Sharing Formula set forth in this Exhibit.</td>
</tr>
<tr>
<td><strong>General Contractor’s Fee</strong></td>
<td>This line item covers costs for Lead Company’s general contractor’s General and Administrative expenses and mark-up. This includes, but is not limited to, the allocation of the general contractor’s corporate overhead and is apportioned to the build as a percentage cost.</td>
<td>Each participant to pay percentage based on the Equity Cost Sharing Formula set forth in this Exhibit.</td>
</tr>
<tr>
<td><strong>Lead Company Management Fee</strong></td>
<td>This line item is the Lead Company’s management fee. This management fee covers cost of capital, oversight, bonds and insurance required for the Lead Company by jurisdictional authorities, staff to write and administer contracts and management costs. The management fee applies to all costs.</td>
<td>The percentage of this fee to be indicated in each Joint Build Agreement and to be paid by each participant company as noted.</td>
</tr>
</tbody>
</table>
EXHIBIT D

set forth in this Exhibit except for materials provided by the Participant.

Equity Cost Sharing Formula:
Each participant pays its pro rata share of the cost of Underground Labor and Common Materials based on the number of conduit for that participant and the size of the conduit.

EXHIBIT D

EXHIBIT E
To Scope of Work
(Name of Project)

PROJECT COST ESTIMATE

(TO BE ATTACHED AS EXCEL SPREADSHEET)
EXHIBIT D

JOINT TRENCH AGREEMENT

THIS JOINT BUILD AGREEMENT ("Agreement"), effective the ___ day of ______, 20___, is made by and between ____________________________, a ____________ corporation with an office at ______________________ ("Lead Company"), and ____________________________, a ____________ corporation with an office at ______________________ ("Participant").

WHEREAS, each party intends to install, construct, own and operate underground conduit facilities ("Facilities") in connection with each party's respective operations; and

WHEREAS, to minimize the costs of constructing separate trenches and Facilities, the parties are willing to jointly construct such trenches and Facilities and to share the costs of such construction in accordance with the terms and conditions set forth herein;

NOW, THEREFORE, in consideration of the mutual covenants, terms, conditions and obligations contained herein, and intending to be legally bound hereby, the parties hereby agree as follows:

1. Certain Definitions. For purposes of this Agreement, the following terms are defined as follows. This is not intended as an exhaustive list of all defined terms used in this Agreement.

   (i) "Acceptance Testing" shall have the meaning attributed to it in Section 4(F).

   (ii) "Access Point" shall mean an opening, individually owned by a particular party, in the Joint Build by which the party may enter for the purpose of installing and maintaining Facilities (i.e. manhole or handhole).

   (iii) "Affiliate" shall mean any Person controlling, controlled by, or under common control with another Person.

   (iv) "Authorizations" shall have the meaning attributed to it in Section 3.

   (v) "Completion Notice" shall have the meaning attributed to it in Section 4(F).

   (vi) "Conduit" shall mean a structure containing one or more Innerducts.

   (vii) "Innerduct" shall mean a single enclosed raceway acceptable for communications cables.

   (viii) "Drawings" shall have the meaning attributed to it in Section 4(A).

   (ix) "Facilities" shall mean Innerducts, Conduits, Access Points and associated equipment, devices and hardware that are supplied by, or installed or designed for, a particular party.

   (x) "Governmental Authority" shall mean any federal, state or local government, or any agency or instrumentality thereof, having competent jurisdiction over the Facilities, the Joint Build or the parties hereto.
6. Sample Engineering Outside Plant (OSP) Standards

<INSERT CLIENT NAME> OSP Standards

Communication Conduit for Fiber Optics

A. Scope of Standard

These guidelines identify and define the <INSERT CLIENT NAME> requirements and policies for designing and installing telecommunications infrastructure and substructure at all <INSERT CLIENT NAME> facilities and within the <INSERT CLIENT NAME> limits and rights-of-ways. Use of, and compliance with these guidelines is mandatory for architects, engineers, and installation contractors working on <INSERT CLIENT NAME> projects.

B. Design Guidelines

A. The <INSERT CLIENT NAME> Infrastructure Standard is based upon the code requirements and telecommunications industry standards contained in the following guidelines. These guidelines will not duplicate the information contained in those references, except where necessary to provide guidance, clarification or direction.

B. In instances where several technical alternatives may be available to provide a design solution, these guidelines will identify the preferred solution to meet <INSERT CLIENT NAME> needs. However, each facility and project is unique. Design for new construction will differ from design for retrofit of existing facilities. These guidelines will differentiate certain design approaches and solutions to be applied to new construction versus existing facilities, and different types of <INSERT CLIENT NAME> facilities. However, designers and installers shall always use sound engineering judgment in order to comply with the requirements of the codes and standards identified in this section.

C. Designs will include, but not be limited to, all man-hole, hand-holds, conduits, roads, bridges, railway crossings, railways, buildings, utility poles, traffic light structures, traffic control boxes, other utilities structures, both existing and planned (new) that are pertinent to the construction of the fiber path.

D. As-builts will be provided in paper 8.5” x 14” format with all construction notes and geospatially correct measurements (verified by GPS), as well as digitally in AutoCAD 2008 or earlier and projected in the coordinate system <ENTER SPECIFIC COORDINATE SYSTEM INFORMATION>. Scale should be 1 ft. x 1 ft. As-builts will include cadastral boundaries to include right of ways and planimetric boundaries that includes edge of pavement. <INSERT
CLIENT NAME> base map can be provided upon request. As-builts shall be provided to designated City representative, incorporating any changes made during or after construction. Final As-builts shall be completed only once all Fiber-Optic cables in said project have been fully installed and tested and tests have been accepted by designated City representative prior to project closeout.

C. Reference Standards
A. Adherence to, and compliance with, the codes and standards referenced, and the <INSERT CLIENT NAME>’s unique requirements and design solutions identified in the manual, is mandatory. Requests to deviate from the industry standards and design solutions prescribed in these guidelines may be submitted, on a case-by-case basis, to the <INSERT CLIENT NAME> Engineer for review and approval. No deviation from the requirements of the National Electrical Code will be allowed.

B. Architects, Consultants, and Contractors shall always reference the most recent standards available. Most references listed below can be purchased directly from the individual standards organization, or from:

Global Engineering Documents
15 Inverness Way East
Englewood, CO 80112-5776
Telephone: (800) 854-7179 (303) 397-7956
Fax: (303) 397-2740
http://www.global.ihs.com

D. Codes, Standards, References, and Applicability
Design, Build Firm to follow all standards, references and technical special provisions referenced below.

A. NATIONAL ELECTRICAL CODE, NFPA 70
The National Fire Protection Association has acted as the sponsor of the National Electrical Code (NEC) since 1911. The original Code was developed in 1897 as a result of the united efforts of various insurance, electrical, architectural, and allied interests. The purpose of the NEC is the practical safeguarding of persons and property from hazards arising from the use of electricity. The NEC provides the minimum code requirements for electrical safety. In telecommunications distribution design, the NEC must be used in concert with the ANSI/EIA/TIA standards identified below, which are intended to insure the performance of the telecommunications infrastructure.

B. ANSI/TIA/EIA STANDARDS
The Telecommunications Industry Association/Electronics Industry Association (TIA/EIA) engineering standards and publications are designed to serve the public interest through eliminating misunderstandings between manufacturers and purchasers. The standards facilitate interchangeability and improvement of products and assist the purchaser in selecting and obtaining the proper product for his or her particular need.

The TIA/EIA Standards are updated every five years. Due to the rapid changes in the telecommunications and electronics industries, TIA/EIA publishes periodic Telecommunications Systems Bulletins (TSB), which provides additional guidance on certain technical issues that must be addressed prior to the next scheduled revision of the standards. The information contained in TSBs is usually incorporated into the applicable standard during the next standards revision. Standards and publications are adopted by TIA/EIA in accordance with American National Standards Institute (ANSI) patent policy. The TIA web site is: http://www.tiaonline.org/

C. FIBER OPTIC TEST STANDARDS, TIA/EIA-526 (SERIES)

The TIA/EIA-455 series, together with its addenda, provides uniform test procedures for testing the fiber optic components intended for, or forming a part of, optical communications and data transmission systems. This series contains standard test procedures for optical fibers, cables, transducers, and connecting and terminating devices.

D. CABLING STANDARD, ANSI/TIA/EIA-568 (SERIES)

The ANSI/TIA/EIA-568-A series, together with its addenda is the Commercial Building Telecommunications Cabling Standard. This standard defines a generic telecommunications wiring system for commercial buildings that will support a multiproduct, multivendor environment. It also provides direction for the design of telecommunications products for commercial enterprise.

The purpose of the standard is to enable planning and installation of building wiring with little knowledge of the telecommunications products that subsequently will be installed. Installation of wiring systems during building construction or renovation is significantly less expensive and less disruptive than after the building is occupied. TIA/EIA-568-A series establishes performance and technical criteria for various wiring system configurations for interfacing and connecting their respective elements.

E. GROUNDING AND BONDING, ANSI/TIA/EIA-607 (SERIES)

The ANSI/TIA/EIA-606 (series) is the Commercial Building, Grounding and Bonding Requirements for Telecommunications. The National Electrical Code (NEC) provides grounding, bonding, and electrical protection requirements to ensure life safety. Modern telecommunications systems require an effective grounding infrastructure to insure optimum performance of the wide variety of electronic information transport systems that may be used throughout the life of a building. The grounding and bonding requirements of this standard are additional technical requirements for
telemcommunications that are beyond the scope of the NEC. These standards are intended to work in concert with the cabling topology specified in ANSI/TIA/EIA-568-A series, and installed in the pathways and spaces designed in accordance with ANSI/TIA/EIA-569-A.

F. CUSTOMER OWNED OUTSIDE PLANT (OSP), ANSI/TIA/EIA-758
The ANSI/TIA/EIA-758 provides industry standards for the design and construction of customer owned OSP infrastructure. Unless specified otherwise in the <INSERT CLIENT NAME>, standard OSP designed and constructed at all <INSERT CLIENT NAME> facilities will be in compliance with ANSI/TIA/EIA-758.

G. TRANSMISSION PERFORMANCE SPECIFICATIONS, TIA/EIA BULLETIN TSB67
TSB67 is the Transmission Performance Specification for Field Testing of Unshielded Twisted-Pair (UTP) Cabling Systems. This bulletin specifies the electrical characteristics and performance requirements of field test instruments, test methods, and the minimum transmission requirements for UTP cabling. All testing of horizontal distribution cabling at <INSERT CLIENT NAME> facilities will be performed with a TSB67 Level II test instrument.

H. ADDITIONAL HORIZONTAL CABLING PRACTICES FOR OPEN OFFICES, TIA/EIA BULLETIN TSB75
This document specifies optional practices for open office environments, for any horizontal telecommunications cabling recognized in TIA/EIA-568. It specifies optional cabling schemes and topologies for horizontal cabling routed through modular office furniture or movable partitions, which are frequently reconfigured.

I. LOCAL AREA NETWORK ETHERNET STANDARD, IEEE 802.3 (SERIES)
<INSERT CLIENT NAME> utilizes the Ethernet LAN protocol at all facilities. All <INSERT CLIENT NAME> infrastructures must be designed to support the Institute of Electrical and Electronic Engineers (IEEE) Ethernet 802.3 standards, which define protocols and signaling technologies. All newly installed cabling must support 1000BaseX Gigabit Ethernet protocol based on the IEEE 802.3z standard.

J. THE BICSI TELECOMMUNICATIONS DISTRIBUTION METHODS MANUAL
The Building Industry Consulting Service International, Inc. (BICSI) is a Telecommunications Association whose mission is to provide state-of-the-art telecommunications knowledge to the industry, resulting in good service to the end user. BICSI develops and publishes the Telecommunications Distribution Methods Manual (TDMM). The TDMM is not a code or standard. The TDMM is an extensive volume of information on the various aspects of telecommunications systems and telecommunications distribution. The TDMM provides discussions and examples of various engineering methods and design solutions that can be selected and employed in order to meet the requirements of the NEC and ANSI/TIA/EIA standards. Designers and installers are encouraged to use the TDMM as an engineering
tool, within the constraints of the unique requirements of the <INSERT CLIENT NAME> Infrastructure Standards.

K. CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) Refer to the current standard for CALTRANS Intelligent Transportation Systems, Technical Special Provisions for Fiber Optic Cable and Interconnect;

L. INTERNATIONAL TELECOMMUNICATIONS UNION – (ITU-T 652 Categories A, B, C, D) Refer to the international standard on Fiber Optic Cable covering “reduced-water-peak”, “low-water-peak” and “full spectrum fiber”. Material deployed in the project shall be ITU-T 652.D full spectrum compliant such as Corning SMF-28e for full compatibility and interoperability with legacy fiber, while providing low Polarization Mode Dispersion (PMD).

E. Definitions

**Fiber Optic Cable:** A cable that contains individual glass fibers, designed for the transmission of digital information, using light pulses.

**All Dielectric Self Support (ADSS) Cable:** A cable designed and constructed with non-metallic components, that is designed for aerial applications and does not require a separate cable messenger.

**Loose Tube Cable:** A cable designed and constructed with non-metallic components, which is designed for underground applications. These are "dry" cables using water swellable powders to protect against water penetration.

**OTDR:** Optical Time Domain Reflectometer. A device used for characterizing a fiber, wherein an optical pulse is transmitted through the fiber and the resulting backscatter and reflections are measured as a function of time.

**Single-mode Fiber:** An optical fiber with a small core diameter, in which only a single mode of light is capable of propagation. All Single-mode glass employed on project shall meet or exceed .35/.25dB/km optical attenuation and Polarization Mode Dispersion: \( \leq 0.5 \text{ ps/km} \)

**Multi-mode Fiber:** An optical fiber whose core diameter is large compared with the optical wavelength and which, consequently, a large number of light modes are capable of propagation.

**Splicing:** A permanent junction between optical fiber splices. May be thermally fused or mechanically applied.

**Minimum Bend Radius:** The minimum radius a fiber may be bent before optical losses are induced.
F. Guidelines for Designing Underground Fiber Optic Cable Routes

Guiding California Department of Transportation (CALTRANS) Indexes and regulations should be used as well as all applicable codes in force.

Conduit Placement
The conduit shall be placed at an offset from the roadway that meets the governing MDT regulations and indexes while still staying within the ROW. If this cannot be accomplished please raise issue to the <INSERT CLIENT NAME> Project Engineer or liaison.

Depth (Minimum / Maximum)
The conduit used as the primary carrier of the fiber optic cable should be buried no greater than 42" and no less than 36" beneath grade except where code requires otherwise or directed in writing by the Project Engineer on behalf of the <INSERT CLIENT NAME>.

Grade away from Buildings/Structures
The conduit shall be placed in such a way to as to maintain a gradual grade down away from buildings and other major structures.

Conduit type/Inner Duct type
Standard placement shall be of quantity (2), 2" ID HDPE conduit direct buried/trenched/bored as appropriate to the construction needs (Color Orange and Blue). If specified an outer conduit shall be of the HDPE type, of suitable strength per the governing MDT indexes for the location of work. Conduit shall be 6" I.D. in size with quantity (2), 2" ID HDPE conduits (Color Orange and Blue)

All conduits and inner ducts should be cleared and cleaned prior to capping.

Conduit Turns & Transitions
All conduit turns shall be made with 45-degree bends or sweeps. At no time shall 90-degree bends be utilized in the outside plant arena, unless it is an already existing conduit, and approved by the <INSERT CLIENT NAME>.

Exceptions may be made to this rule for work inside of buildings.

Trace Wire
A minimum #12 AWG trace wire should be placed along with all conduits put in place. This trace wire should maintain continuity from end station to end station. Where possible it is okay to use vaults/hand holes for joining the trace wire, while keeping these joints visible and out of the way of the fiber cable. Where not possible please use the small hand hole for joining the trace wire.

Marker Poles
Easily visible, marked, 6’ fiber optic marker poles should be placed above the conduit at all major transitions to said conduit (turns greater than 25 degrees, etc.), where applicable. Please get marking poles approved by the <INSERT CLIENT NAME> prior to installation/purchase.

**Conduit Entering Hand Holes/Man Holes**
All conduits should be stubbed up underneath the bottom of each manhole/hand hole leaving at least 8” but no more than 12” of visible conduit exposed. Conduit and inner ducts should be capped until use, after use they should be plugged appropriately to maintain the integrity of the conduit/inner duct from dirt and water.

**Locate Information**
As an as-built information gathering job, all splice points, vaults/hand hole/manhole/conduit turns of 45 degrees or greater should receive a GPS coordinate that is marked and labeled back onto the as-built drawings.

**Building Entrances**
All building entrances should be checked and approved with the <INSERT CLIENT NAME> Project Engineer or liaison. Preference is given in the following order (but dictated by the facility itself) utilizing existing conduit to enter the building, core drilling and bringing conduit up through the floor, bringing conduit up the outside of a facility, attaching a pull box to the exterior of said building and entering through the wall of the building.

**Box Sizing**
Please confirm with the <INSERT CLIENT NAME> your selection of boxes and box sizes PRIOR to utilization of said boxes in quote or design. All boxes utilized MUST meet the MDT applicable indexes and be on the MDT approved equipment list. The following sizes are to be used wherever possible:

- 16x22x18.” (straight wall)
- 16x22x30.” (flared wall)
- 17x30x18.” (flared wall)
- 24x36x30.” (flared wall)
- 30x60x36.” (flared wall)

Please get all boxes approved during the design phase and prior to purchasing/installation of said boxes. All box lids shall have a Logo embedded on them. This logo is to be provided by the <INSERT CLIENT NAME>.

**G. Guidelines for Installing Conduit**

**Depth (Minimum / Maximum)**
The conduit used as the primary carrier of the fiber optic cable should be buried no greater than 42" and no less than 36" beneath grade except where code requires otherwise or directed in writing by the Project Engineer on behalf of the <INSERT CLIENT NAME>.

**Reel Placement**
Have the reel set adjacent to the manhole and use a fiber optic manhole pulling block assembly.

**Conduit type/ Inner Duct type**
Standard placement shall be of quantity (2), 2" ID HDPE conduits (Color Orange and Blue), direct buried/trenched/bored as appropriate to the construction needs.

If specified an outer conduit shall be of the HDPE type, of suitable strength per the governing MDT indexes for the location of work. Conduit shall be 6” I.D. in size with quantity (2), 2” ID HDPE conduits (Color Orange and Blue).

All conduits and inner ducts should be cleared and cleaned prior to capping.

**H. Guidelines for Installing/Pulling Underground Fiber Optic Cable**

**Bend Radius**
The main risk of damage to the fiber optic cable is by overlooking the minimum-bending radius. It is important to know that the damage occurs more easily when the cable is bent under tension, so when the installation is in process be sure to allow for at least the minimum bending radius. The number of 90-degree turns on a pull shall not exceed four (4).

**Reel Placement**
Have the reel set adjacent to the manhole and use a fiber optic manhole pulling block assembly from Sherman & Reilly (or similar).

**Cable Slack**
Please coil 150 feet of cable at transition points, termination points, and every 1500 feet.

**Splices**
All splice locations will be designated by the <INSERT CLIENT NAME>.

**Strength**
The fibers in the cable will shatter under considerable impact, pressure or if pulling tensions exceed 600 LB, although from the outside of the cable this will not be apparent. With fiber optic cable the jacket of the cable and the Kevlar layer directly beneath give the cable its strength so please be sure to note and repair all nicks and cuts.

**Installation**
When installing use a swivel eye for pulling the fiber optic cable and conduit system.

Precautions
Please review the manufacturer’s installation instructions prior to commencing with the installation. If any questions arise during installation please refer to the manufacturer’s installation instructions, or notify the Project Engineer.

Testing
Perform OTDR test on each fiber in the installed cable, to verify the parameters of each fiber meet the system design criteria. Power meter tests should also be performed. All test results should be provided to the <INSERT CLIENT NAME> Project Engineer in PDF format.

I. Safety
Contractor to provide proper work zone safety through an approved site-specific MOT (Maintenance of Traffic) plan.

Contractor to ensure that all personnel working in the field adhere to all PPE (Personnel Protection Equipment) requirements needed for the particular job location at all times.

Contractor to conduct pre-work safety briefings with workers prior to starting work each day/shift in the field. This briefing should be conducted by supervisor/manager in the field. All safety briefings should be logged in paper and this log easily accessible by <INSERT CLIENT NAME> personnel in the field.

J. Locating Fiber Optic Cables
<INSERT CALIFORNIA SPECIFIC STATE LOCATE REQUIREMENTS>

The DigAlert office will contact the <INSERT CLIENT NAME> locating contractor requiring locates of our facilities.

Aiding the locators, please install a #12 gauge wire. Pull #12 gauge wire in with the fiber cable for the underground conduit systems.

Terminate the ends of the #12 gauge wire in a handhold box. This box can be used by the locating contractor.
Proposal
Broadband Partnership Development
City of New Braunfels, TX
March 16, 2016

Prepared For
Kristi Aday
Assistant City Manager
City of New Braunfels, TX

Prepared By
Magellan Advisors
450 Alton Road, Suite 1402 Miami, FL 33139
O: 386.931.3520
E: cviolette@magellan-advisors.com
March 16, 2016

Kristi Aday
Assistant City Manager
New Braunfels TX

Kristi,

As the City of New Braunfels’ moves forward with the next steps in their broadband initiative, Magellan Advisors is prepared to assist you in evaluating proposals, negotiating with broadband providers and moving toward definitive public-private partnerships with one or more broadband providers. We have a strong track record of assisting public organizations through this process and are excited at the opportunity to help you transform New Braunfels’ into a Gigabit Community.

We understand that the City’s goals are to accelerate the deployment of next-generation broadband services for its citizens, businesses and community anchors. To do so, the City is interested in leveraging its existing conduit, fiber-optic and related infrastructure with providers to speed the process, reduce the cost and streamline deployment of fiber-based broadband. The objectives of New Braunfels’ broadband initiative are to promote economic growth and competitiveness in the area, drive job creation, foster innovation, enhance healthcare delivery, improve education and support New Braunfels’ overall community.

To successfully achieve these goals, the City will need to evaluate information and proposals from broadband providers to determine how each response meets the overall goals of the project and the needs of the community. As the City moves forward with the potential respondent(s), the City will need to navigate key public-private partnership issues to protect the public interest and ensure that the private partner meets the needs of the community. This includes evaluating the capabilities of private service providers from technical, operational, business organizational and financial perspectives to ensure that the potential partnership(s) developed between the City and provider(s) are well aligned.

Magellan Advisors has significant experience representing public organizations in broadband RFI, RFP and ITN (“Invitation to Negotiate”) solicitations. For the City, we propose to provide our professional consulting services for the City to assist you through the next phase of preparing and soliciting an RFI, along with evaluation and selection of the most responsive broadband provider from the RFI, which we refer to as Task 1 in the scope below. We have also provided a breakdown of the additional services Magellan could provide beyond Task 1, which would entail representing the City’s interests in negotiating with provider(s) and working toward a definitive agreement for the public-private partnership.
I. Scope of Work

Task 1

1. Assist the City in the preparation and solicitation of an RFI to garner responses from ISP’s willing to partner with the City of New Braunfels.
   
   a. Work with the City to identify what New Braunfels is willing to offer in a partnership.
   
   b. Work to identify what the City is looking for from a private provider in the partnership.
   
   c. Develop the RFI to align with the City’s standards and goals for the project.

2. Assist the City in the evaluation of the RFI responses received from the respondents, in the following subject areas:
   
   a. Technical assessment of each response,
   
   b. Operational assessment of each response,
   
   c. Alignment with City’s goals and objectives
   
   d. Corporate qualifications of the respondents,
   
   e. Financial qualifications of the respondents,
   
   f. Business strategy alignment with City’s project; and
   
   g. Identifications of potential risks.

3. After an initial review, seek clarification from each respondent to clearly identify the components of their proposals;

4. Develop a “one page” summary of each response that identifies the key aspects of the proposals and a framework to compare them to one another;

5. Hold meetings and other correspondence with the City and respondents to discuss each respondent’s proposal, seek clarification and gain more information;
6. Work with the City team to rank the proposals and select the most responsive ones; and,

7. Identify the most responsive proposal and support staff in making recommendations to City Council.

8. Based on the Task 1 Scope of Work, we believe that this portion of the project will be complete within 5 weeks.

**Task 2**

1. Working on behalf of the City with staff and City-appointed legal council to negotiate a memorandum of understanding with the selected broadband provider(s);

2. Assisting City staff through the due diligence process on key business, technical, financial and operational issues pertaining to the broadband provider(s) capabilities;

3. Assisting City staff to determine the optimal plan with the broadband provider(s) for buildout of the broadband network; and

4. Assisting City staff and City-appointed legal council on development of the definitive agreement to memorialize the terms and conditions of the public-private partnership.

The Task 2 Scope of Work may take significantly more time, depending on the actual negotiations and legal review between the City and provider(s). We estimate that the time needed to execute a definitive agreement between the parties will be up to five months beyond the initial Task 1 project.
## II. Timeline

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>Month 1</th>
<th>Month 2</th>
<th>Month 3</th>
<th>Month 4</th>
<th>Month 5</th>
<th>Month 6</th>
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<td></td>
<td></td>
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</tr>
<tr>
<td>2</td>
<td>Partnership Development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
III. Pricing

The total cost to the City of New Braunfels as outlined in the chart below is $57,200 and includes all work to be completed by Magellan for the City as stated in this Proposal. Our hourly rate for the proposal is $130 per hour inclusive of overhead and travel and we estimate completion of this project will require 440 billable hours of work. During the duration of the project, Magellan will meet with City staff, hold meetings with stakeholders, review plans, visit regional sites and make presentations to the City project teams and the City Commission as well as other activities to be determined between the City and Magellan.

In addition, Magellan will honor this rate going forward if the City wishes to have Magellan manage the marketing/sales effort or act as owner’s rep through the construction and implementation of this initiative. Magellan is open to the discussion of moving from a time and materials agreement to more of a monthly retainer to support the program going forward.

We anticipate the need for potential outside legal resources to support the final agreements. We have several firms that we can bring to the table and recommend the City contract with them directly.

<table>
<thead>
<tr>
<th>Description</th>
<th>Hours</th>
<th>Rate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 1</td>
<td>150</td>
<td>$130</td>
<td>$19,500</td>
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<tr>
<td>Task 2</td>
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<td>Total Price (Not-To-Exceed)</td>
<td>440</td>
<td>$130</td>
<td>$57,200</td>
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</table>

We have enjoyed working with the City over the past year and look forward to continuing our professional relationship as your trusted broadband consulting partner.
Signature and Acceptance

Consultant: Magellan Advisors, LLC
Print Name: John Honker
Title: President & CEO
Signature: [Signature]
Date: 3/16/2016

Client:
Print Name:
Title:
Signature:
Date:
SUBJECT: Discuss and consider approval of a resolution approving a Loan Agreement and related agreements related to the commitment of development funding to the Reserve at Engel, a multifamily housing development.

BACKGROUND/RATIONALE:
In February 2015, the City Council approved a project expenditure of up to $833,000 recommended by the New Braunfels Industrial Development Corporation as a loan for the Reserves at Engel. The Reserves at Engel is the name of a proposed 96 unit multi-family development on approximately 7.3 acres at the northeast corner of Engel Road and North Interstate 35. The total development cost is estimated at $16.3 million. Miller-Valentine Group, the developer for the project, has developed, built and managed more than 13,000 multifamily units over 30 years throughout the southeast U.S. They have three properties in development in Texas from the 2012 and 2013 Low Income Housing Tax Credits cycle. The project received an allocation of tax credits for the project and the developer is requesting approval of the loan agreements to proceed.

Reserve at Engel

Miller Valentine Group is developing a 96 unit multi-family project on approximately 7.3 acres at the northeast corner of Engel Road and North Interstate 35. All of the units would be set aside for individuals earning 30%, 50%, and 60% of the average family median income. The Reserve at Engel will offer tenant services and amenities typical of projects receiving Housing Tax Credits and are detailed in Attachment A. The property is zoned M-1 and would not require a rezoning approval before development could proceed. It is located in Council District 1.

The unit breakdown and rent levels (with utility allowance) are as follows for this property:

<table>
<thead>
<tr>
<th></th>
<th>30% AMI</th>
<th>50% AMI</th>
<th>60% AMI</th>
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</thead>
<tbody>
<tr>
<td>Bedrooms</td>
<td>Units</td>
<td>Rents</td>
<td>Units</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>$331</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>$397</td>
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</tr>
<tr>
<td>3</td>
<td>4</td>
<td>$459</td>
<td>15</td>
</tr>
</tbody>
</table>

Commitment of Development Funding by Local Political Subdivision

At their meetings in February 2015, the NBIDC and City Council approved the project expenditure utilizing a concept staff had termed a “match-funded loan.” Many local governmental entities
want to support the development of LIHTC developments but do not have the local resources to provide the total amount of local development funding needed for the applicant to maximize its points in this scoring category. To meet this challenge, some communities have developed a program to enable them to make a loan into the project without significant risk. The typical method involves the local governmental entity (in this case, the NBIDC) obtaining a loan from a commercial bank (the developer's construction and permanent financier, Citi) and using the loan proceeds to make a matching loan to the applicant (developer). The repayment terms of the bank loan to the governmental entity mirror the terms given to the developer (as described above). To secure the loan, the governmental entity requires the developer to collateralize the loan to the bank's satisfaction and makes the loan non-recourse to the governmental entity (NBIDC). This means the bank agrees to look solely to the collateral and the repayment of the loan made to the project owners. Projects that are able to secure these loans are able to score high enough to receive tax credit funding from the state. Only two or three of these projects are funded in this region and in the absence of this loan, this project will not be funded.

By providing collateral for the loan and Citi making the loan non-recourse to the borrowing entity (NBIDC), the public entity can provide funding into the project without significant risk. The NBIDC will borrow $833,000 from Citibank and the proceeds will then be loaned to the project. The project owner (developer) will collateralize the loan with a second lien on the project and agree to pay the debt service on the loan from NBIDC directly to Citi to satisfy NBIDC’s obligations to Citi. At the City Council meeting in February 2015 where the expenditure was discussed, staff said that the loan documents would come back to the NBIDC and City Council for consideration. Staff and the attorneys reviewing the documents believe they reflect the arrangement as originally presented to the City Council.

The loan is a three percent (3%) loan, cannot be paid off early and will be in place for a full 15 years. NBIDC receives a 3% origination fee for participating. The loan is non-recourse, which means that the bank can only look to the partnership building the project for repayment. The documents make it clear that the NBIDC will not be a source of repayment in the event the bank needs to collect on its loan. The bank’s sole source of repayment on the project is the real estate, the project and the developer. The loan from NBIDC to the project owner is assigned to Citi as collateral and the partnership is giving a second lien deed of trust to secure the loan. The loan does not go into place until the project is constructed, leased, and operates for 90 days with ninety percent (90%) occupancy. This structure enables NBIDC to make a loan to the project without incurring significant risk and enables the project to receive $13,017,000 in tax credit funding through the state.

**Addresses a Need/Issue in a City Plan or Council Priority:**

<table>
<thead>
<tr>
<th>Yes</th>
<th>City Plan/Council Priority:</th>
</tr>
</thead>
<tbody>
<tr>
<td>16. Foster opportunities for affordable housing</td>
<td></td>
</tr>
<tr>
<td>18. Work with existing entities to ensure sustainable quality development.</td>
<td></td>
</tr>
</tbody>
</table>

**ADDRESSES A NEED/ISSUE IN A CITY PLAN OR COUNCIL PRIORITY:**
**Fiscal Impact:**
If approved, the NBIDC will borrow $833,000 from Citibank and loan it into the project. The subsequent debt service payments will be paid for by the project and its developer. The NBIDC will charge a three percent (3%) origination fee of $24,990.

**Board/Commission Recommendation:**
At its meeting on March 10, 2016, the NBIDC approved the loan agreement and supporting documents.

**Staff Recommendation:**
Staff recommends approval of the loan agreements and other documents related to the NBIDC loan with Citibank and the development partnership.

**Attachments:**
Attachment A- Loan Agreement
Attachment B- Citi Note
Attachment C- Multifamily Permanent Subordinate Note
Attachment D- Subordinate Multifamily Deed of Trust
Attachment E- Collateral Assignment of Loan
Attachment F- Intercreditor and Subordination Agreement
Attachment G- Financing Statement
Attachment H- Exceptions to Non-Recourse
Attachment I- Agreement of Environmental Indemnification
Attachment J- Reserve at Engel Presentation
Attachment K- City Council Resolution
CITI SUBDEBT FORM

Last Revised by Citi 10-2015

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LOAN AGREEMENT

AMONG

CITIBANK, N.A.,
AS LENDER,

AND

NEW BRAUNFELS INDUSTRIAL DEVELOPMENT CORPORATION,
AS BORROWER

AND

RESERVE AT ENGEL ROAD, LLC
AS PROJECT OWNER

Dated as of March __, 2016
LOAN AGREEMENT

THIS LOAN AGREEMENT (this “Citi Loan Agreement”) is dated for reference purposes only as of the ___ day of March, 2016, but will not be effective and binding on the parties hereto until the Closing Date (as hereinafter defined), and is among NEW BRAUNFELS INDUSTRIAL DEVELOPMENT CORPORATION, a nonprofit corporation created by the Texas Development Corporation Act (together with its successors and assigns, the “Borrower”), RESERVE AT ENGEL ROAD, LLC, a Texas limited liability company (the “Project Owner”) and CITIBANK, N.A., a national banking association (together with its successors and assigns, the “Lender”).

WITNESSETH:

RECITALS

WHEREAS, Project Owner has applied to the Lender for a construction to permanent loan (“Senior Loan”) evidenced by that certain Construction Loan Agreement of even date herewith by and between Project Owner and Lender (the “Senior Loan Agreement”), for the acquisition, construction, rehabilitation, development, equipping and/or operation of a 96-unit multifamily residential project located in New Braunfels, Comal County, Texas, known or to be known as Reserve at Engel Road (“Project”);

WHEREAS, the Borrower has also applied to the Lender for a loan (the “Citi Loan”) to further finance the acquisition, development, construction and/or rehabilitation of the Project. The Citi Loan is evidenced by that certain Citi Note dated March __, 2016, in the amount of $833,000.00 (“Citi Note”), and will be advanced to Borrower pursuant to this Citi Loan Agreement, the proceeds of which will then be loaned (the “Project Owner Subordinate Loan”) by Borrower to the Project Owner and will be evidenced by a Multifamily Permanent Subordinate Note in the amount of $833,000.00 (the “Project Owner Subordinate Note”) and secured by, among other things, that certain Subordinate Multifamily Deed of Trust, Assignment of Rents, Security Agreement and Fixture Filing (as amended, restated and/or supplemented from time to time, the “Subordinate Security Instrument”), encumbering the Mortgaged Property. As security for the Citi Loan, Borrower will collaterally assign the Project Owner Subordinate Loan pursuant to that certain Collateral Assignment of Loan (the “Collateral Assignment”).

NOW, THEREFORE, in consideration of the premises and the mutual representations, covenants and agreements herein contained, the parties hereto do hereby agree as follows:

ARTICLE I

DEFINITIONS; PRINCIPLES OF CONSTRUCTION

Section 1.1. Specific Definitions; Principles of Construction. For all purposes of this Citi Loan Agreement, except as otherwise expressly provided or unless the context otherwise requires:
(a) Unless specifically defined herein, all capitalized terms shall have the meanings ascribed thereto in the Subordinate Security Instrument, the Senior Loan Agreement or the Senior Loan Documents, as such documents shall be amended, modified or supplemented from time to time and notwithstanding the repayment of the Senior Loan or the termination of any such documents.

(b) All accounting terms not otherwise defined herein shall have the meanings assigned to them, and all computations herein provided for shall be made, in accordance with GAAP.

(c) All references in this instrument to designated “Articles,” “Sections” and other subdivisions are to the designated Articles, Sections and subdivisions of this instrument as originally executed.

(d) All references in this instrument to a separate instrument are to such separate instrument as the same may be amended or supplemented from time to time pursuant to the applicable provisions thereof.

(e) Unless otherwise specified, (i) all references to sections and schedules are to those in this Citi Loan Agreement, (ii) the words “hereof,” “herein” and “hereunder” and words of similar import refer to this Citi Loan Agreement as a whole and not to any particular provision, (iii) all definitions are equally applicable to the singular and plural forms of the terms defined and (iv) the word “including” means “including but not limited to.”

Section 1.2. Definitions. The following terms, when used in this Citi Loan Agreement (including when used in the above recitals), shall have the following meanings:

“Borrower” shall have the meaning set forth in the recitals hereto.

“Borrower Subordinate Payment Obligations” shall mean all payment obligations of the Borrower under the Citi Loan Documents.

“Citi Loan” shall mean the loan made by the Lender to the Borrower pursuant to this Citi Loan Agreement, in the maximum principal amount of the Citi Loan Amount, as evidenced by the Citi Note.

“Citi Loan Amount” shall mean the maximum principal amount of $833,000.00.

“Citi Loan Documents” shall mean this Citi Loan Agreement, the Citi Note, and the Collateral Assignment.

“Citi Loan Payments” shall mean the loan payments payable pursuant to the Citi Note.

“Citi Loan Proceeds” shall mean proceeds of the Citi Loan, to be disbursed by Lender to Borrower in accordance with Article III of this Citi Loan Agreement.

“Citi Note” shall have the meaning set forth in the Recitals hereto.
“Closing Date” shall mean March __, 2016.

“Collateral Assignment” shall have the meaning set forth in the recitals hereto.

“Events of Default” shall have the meaning set forth in Section 5.1 hereof.

“Potential Default” shall mean the occurrence of an event, which, under this Citi Loan Agreement or any other Citi Loan Document, would, but for the giving of notice or passage of time, or both, be an Event of Default.

“Project” shall have the meaning set forth in the recitals hereto.

“Project Owner” shall have the meaning set forth in the recitals hereto.

“Project Owner Subordinate Loan” shall have the meaning set forth in the recitals hereto.

“Project Owner Subordinate Note” shall have the meaning set forth in the recitals hereto.

“Senior Loan” shall have the meaning set forth in the recitals hereto.

“Senior Loan Agreement” shall have the meaning set forth in the recitals hereto.

“Senior Loan Documents” means the Senior Loan Agreement and all of the documents executed in connection therewith evidencing or securing the Senior Loan.

“Subordinate Debt” shall mean all debt that is subordinate to the Senior Loan which is not the Project Owner Subordinate Loan.

ARTICLE II

GENERAL

Section 2.1. Citi Loan; Citi Note.

(a) On the Closing Date, the Lender shall make the Citi Loan to the Borrower pursuant to the terms hereof, which shall mature and be payable at the times and in the amounts required under the terms hereof and of the Citi Note. The Borrower hereby accepts the Citi Loan. As evidence of its obligation to repay the Citi Loan, simultaneously with the delivery of this Citi Loan Agreement to the Lender, the Borrower hereby agrees to execute and deliver the Citi Note.

(b) On the Closing Date, the Borrower shall make the Project Owner Subordinate Loan to the Project Owner pursuant to the terms hereof, which shall mature and be payable at the times and in the amounts required under the terms hereof and of the Project Owner Subordinate Note. The Project Owner hereby accepts the Project Owner Subordinate Loan. As evidence of its obligation to repay the Project Owner Subordinate Loan, simultaneously with the delivery of
this Citi Loan Agreement to the Borrower, the Project Owner hereby agrees to execute and deliver the Project Owner Subordinate Note.

Section 2.2. Loan Payments.

(a) The Borrower shall make the Citi Loan Payments to the Lender in accordance with the Citi Note.

(b) The Project Owner shall make payments to the Borrower on the Project Owner Subordinate Note.

(c) All payments made by the Borrower and the Project Owner hereunder or under the other Citi Loan Documents and the Project Owner Subordinate Note shall be made irrespective of, and without any deduction for, any set-offs or counterclaims, but such payment shall not constitute a waiver of any such set-offs or counterclaims.

Section 2.3. Additional Payments.

A. Borrower Obligations

(a) The Borrower shall pay to the Lender on demand the following amounts:

(i) all fees, charges, costs, advances, indemnities and expenses, including agent and counsel fees, of the Lender incurred under the Citi Loan Documents; and

(ii) any late charge due and payable under the terms of the Citi Note and Section 2.4 herein.

(b) The Borrower shall pay to the party entitled thereto as expressly set forth in this Citi Loan Agreement, or the other Citi Loan Documents:

(i) all expenses incurred in connection with the enforcement of any rights under this Citi Loan Agreement, any other Citi Loan Document; and

(ii) all other payments of whatever nature that the Borrower has agreed to pay or assume under the provisions of this Citi Loan Agreement or any other Citi Loan Document; and

B. Project Owner Obligations.

(a) The Project Owner shall pay to the holder of the Project Owner Subordinate Note on demand the following amounts:

(i) all fees, charges, costs, advances, indemnities and expenses, including agent and counsel fees, of the holder of the Project Owner Subordinate Note incurred under and with respect to the loan evidenced by the Project Owner
Subordinate Note, the Subordinate Security Instrument, and the Mortgaged Property, as and when the same become due;

(ii) all charges, costs, advances, indemnities and expenses, including agent and counsel fees, of the holder of the Project Owner Subordinated Note incurred by holder of the Project Owner Subordinated Note at any time in connection with the Project Owner Subordinate Loan, the Mortgaged Property or the Project, including, without limitation, reasonable counsel fees and expenses incurred in connection with the interpretation, performance, or amendment and all counsel fees and expenses relating to the enforcement of any document relating to the Project Owner Subordinate Loan or in connection with questions or other matters arising under such documents or in connection with any federal or state tax audit; and

(iii) any late charge due and payable under the terms of the Project Owner Subordinate Note.

(b) The Project Owner shall pay to the party entitled thereto as expressly set forth in this Citi Loan Agreement, the Project Owner Subordinate Note or the Subordinate Security Instrument:

(i) all expenses incurred in connection with the enforcement of any rights under this Citi Loan Agreement, the Project Owner Subordinate Note, or the Subordinate Security Instrument;

(ii) all other payments of whatever nature that the Project Owner has agreed to pay or assume under the provisions of this Citi Loan Agreement, the Project Owner Subordinate Note, or the Subordinate Security Instrument; and

(iii) all expenses, costs and fees relating to inspections of the Project or the Mortgaged Property required by the holder of the Project Owner Subordinate Note in accordance with this Citi Loan Agreement.

Section 2.4. Overdue Payments: Payments if Default. If any amount due under the Citi Loan Documents is not paid by or on behalf of the Borrower when due, the Borrower shall pay to the Servicer, a late charge in the amount and to the extent set forth in the Citi Note.

Section 2.5. Grant of Security Interest; Application of Funds.

(a) Borrower hereby grants to Lender, as security for the Borrower’s obligations, a security interest in, any and all deposits (general or special, including but not limited to debt evidenced by certificates of deposit, whether matured or unmatured, but not including trust accounts) and any other debt at any time held or owing by Lender to or for the credit or the account of Borrower (contingent on collateral) arising out of this Citi Loan Agreement or the other Citi Loan Documents.
(b) To the extent not inconsistent with the Subordinate Security Instrument and as security for the payment of all obligations under the Project Owner Subordinate Note and the performance by the Project Owner of all other terms, conditions and provisions of the Project Owner Subordinate Note and the Subordinate Security Instrument, the Project Owner hereby pledges and assigns to the holder of the Project Owner Subordinate Loan, and grants to the holder of the Project Owner Subordinate Loan a security interest in, all its right, title and interest in and to all payments to or moneys held in the funds and accounts created and held by the holder of the Project Owner Subordinate Loan, such security interest being subject and subordinate to the security interest in favor of the holder of the Senior Loan or any other loan secured by a deed of trust or mortgage recorded prior to the Subordinate Security Instrument. This Citi Loan Agreement is, among other things, intended by the parties to be a security agreement for purposes of the UCC. Upon the occurrence and during the continuance of an Event of Default hereunder, the holder of the Project Owner Subordinate Loan shall apply or cause to be applied any sums held by the holder of the Project Owner Subordinate Loan in any manner and in any order determined by the holder of the Project Owner Subordinate Loan, in the holder of the Project Owner Subordinate Loan’s sole and absolute discretion.

Section 2.6. Marshalling; Payments Set Aside. Lender shall be under no obligation to marshal any assets in favor of Borrower or any other Person or against or in payment of any or all of the proceeds. To the extent that Borrower makes a payment or payments or transfers any assets to Lender, or Lender enforces its liens, and such payment or payments or transfers, or the proceeds of such enforcement or any part thereof are subsequently invalidated, declared to be fraudulent or preferential, set aside or required to be repaid to a trustee, receiver or any other party in connection with any insolvency proceeding, or otherwise, then: (i) any and all obligations owed to Lender and any and all remedies available to Lender under the terms of the Citi Loan Documents or in law or equity against Borrower shall be automatically revived and reinstated to the extent (and only to the extent) of any recovery permitted under clause (ii) below; and (ii) Lender shall be entitled to recover (and shall be entitled to file a proof of claim to obtain such recovery in any applicable bankruptcy, insolvency, receivership or fraudulent conveyance or fraudulent transfer proceeding) either: (x) the amount of payments or the value of the transfer or (y) if the transfer has been undone and the assets returned in whole or in part, the value of the consideration paid to or received by Borrower for the initial asset transfer, plus in each case any deferred interest from the date of the disgorgement to the date of distribution to Lender in any bankruptcy, insolvency, receivership or fraudulent conveyance or fraudulent transfer proceeding, and any costs and expenses due and owing, including, without limitation, any reasonable attorneys’ fees incurred by Lender in connection with the exercise by Lender of its rights under this Section 2.6.

ARTICLE III

DISBURSEMENT MATTERS

The proceeds of the Citi Loan shall be disbursed to Borrower and then loaned by Borrower to the Project Owner, as follows:

All of the conditions to Disbursement of the Senior Loan set forth in Article III of the Senior Loan Agreement (other than the provisions of Section 3.4 “Initial Disbursement”) are
deemed to be incorporated by reference into this Citi Loan Agreement; provided, however, the
proceeds of the Citi Loan and the Project Owner Subordinate Loan will be payable in a single
disbursement concurrently with Conversion (and will fund upon satisfaction of all Conditions to
Conversion).

ARTICLE IV
[RESERVED].

ARTICLE V

DEFAULTS

Section 5.1. **Events of Default.** Each of the following events shall constitute
an “Event of Default”:

(a) (i) failure by the Borrower to pay any Citi Loan Payment in the manner and on the
date such payment is due in accordance with the terms and provisions of the Citi Note, or (ii)
failure by the Project Owner to pay when due any payment under the Project Owner Subordinate
Note.

(b) failure by or on behalf of the Borrower to pay when due any amount (other than
as provided in subsection (a) above or elsewhere in this Section 5.1) required to be paid by the
Borrower under this Citi Loan Agreement, the Citi Note, or any of the other Citi Loan
Documents, including a failure to repay any amounts that have been previously paid but are
recovered, attached or enjoined pursuant to any insolvency, receivership, liquidation or similar
proceedings, which default remains uncured for a period of five (5) days after Written Notice
thereof shall have been given to the Borrower;

(c) Failure by or on behalf of the Project Owner to pay any amount due under the
Subordinate Security Instrument, which default remains uncured for a period of five (5) days
after Written Notice thereof to Project Owner;

(d) an Event of Default, as defined by the Citi Note, the Subordinate Security
Instrument or any other Citi Loan Document, occurs (or to the extent an “Event of Default” is
not defined in any other Citi Loan Document, any default or breach by the Borrower of its
obligations, covenants, representations or warranties under such Citi Loan Document occurs and
any applicable notice and/or cure period has expired) or;

(e) an Event of Default, as defined in the Senior Loan Agreement or any Senior Loan
Document occurs (or to the extent an “Event of Default” is not defined in such other Senior Loan
Document, any default or breach by the Borrower of its obligations, covenants, representations
or warranties under such Senior Loan Document occurs and any applicable notice and/or cure
period has expired);

(f) an Event of Default, as defined in the loan documents evidencing any loan
secured by a lien on the Project occurs (or to the extent an “Event of Default” is not defined in
such other loan document, any default or breach by the Borrower of its obligations, covenants,
representations or warranties under such loan document occurs and any applicable notice and/or cure period has expired and the holder of such loan has declared such default in writing);

(g) the Borrower or the Project Owner shall make a general assignment for the benefit of creditors, or shall generally not be paying its debts as they become due;

(h) Any Person who owns a Controlling Interest in Borrower shall make a general assignment for the benefit of creditors, or shall generally not be paying its debts as they become due, or an Act of Bankruptcy with respect to such Person shall occur, unless in all cases the Borrower replaces such Person with a substitute Person owning such Controlling Interest that is acceptable to the Lender; which, in the case of a non-profit Person, may be replaced within ninety (90) days of such event with another non-profit Person acceptable to the Lender, in which case no Event of Default shall be deemed to have occurred;

(i) Any Person who owns a Controlling Interest in Project Owner shall make a general assignment for the benefit of creditors, shall generally not be paying its debts as they become due, or an Act of Bankruptcy with respect to such Person shall occur, unless in all cases the Project Owner replaces such Person with a substitute Person owning such Controlling Interest that satisfies the requirements of Section 21 of the Subordinate Security Instrument; which, in the case of a non-profit Person, may be replaced within ninety (90) days of such event with another non-profit Person acceptable to the Borrower, in which case no Event of Default shall be deemed to have occurred;

(j) a Bankruptcy Event shall occur with respect to Borrower;

(k) a Bankruptcy Event shall occur with respect to the Project Owner or the Managing Member of the Project Owner, provided that any such Bankruptcy Event with respect to the Managing Member of the Project Owner shall not constitute an Event of Default if Borrower replaces such Managing Member of the Project Owner with a person or entity satisfying Lender’s mortgage credit standards for principals and is acceptable to Lender in its sole and absolute discretion within ninety (90) days after notice thereof from Lender or if Equity Investor replaces Managing Member as permitted under the Subordinate Security Instrument; and

(l) all or any part of the property of Borrower is attached, levied upon or otherwise seized by legal process, and such attachment, levy or seizure is not quashed, stayed or released: (i) prior to completion of the construction or rehabilitation, as the case may be, of the Improvements within ninety (90) days of the date thereof.

Section 5.2. Remedies of Lender.

Section 5.2.1 Acceleration. Upon the occurrence of an Event of Default (other than an Event of Default described in paragraph (f), (h) or (i) of Section 5.1) and at any time and from time to time thereafter, as long as such Event of Default continues to exist, in addition to any other rights or remedies available to the Lender pursuant to the Citi Loan Documents or at law or in equity, the Lender may take such action, without notice or demand, as the Lender deems advisable to protect and enforce its rights against the Borrower and in and to the Mortgaged Property, including declaring all amounts due hereunder to be immediately due and payable.
(including, interest on and all other amounts due on the Citi Note to be immediately due and payable), without notice or demand, and apply such payment in any manner and in any order determined by Lender, in Lender’s sole and absolute discretion; and upon any Event of Default described in paragraph (f), (h) or (i) of Section 5.1, all Borrower Subordinate Payment Obligations shall become immediately due and payable at the Lender’s election, in the Lender’s sole discretion (as the case may be), without notice or demand, and the Borrower hereby expressly waives any such notice or demand, anything contained in any Citi Loan Document to the contrary notwithstanding.

Section 5.2.2 Remedies Cumulative. Upon the occurrence of an Event of Default, all or any one or more of the rights, powers, privileges and other remedies available to the Lender against the Borrower under the Citi Loan Documents or at law or in equity may be exercised by the Lender, at any time and from time to time, whether or not all or any of the obligation of Borrower hereunder shall be declared due and payable, and whether or not the Lender shall have commenced any foreclosure proceeding or other action for the enforcement of its rights and remedies under any of the Citi Loan Documents. Any such actions taken by the Lender shall be cumulative and concurrent and may be pursued independently, singly, successively, together or otherwise, at such time and in such order as the Lender may determine in its sole discretion, to the fullest extent permitted by law, without impairing or otherwise affecting the other rights and remedies of the Lender permitted by law, equity or contract or as set forth in the Citi Loan Documents.

Notwithstanding any provision herein to the contrary, the Lender agrees that any cure of any default made or tendered by the Equity Investor shall be deemed to be a cure by the Borrower and shall be accepted or rejected on the same basis as if made or tendered by the Borrower.

Section 5.2.3 Delay. No delay or omission to exercise any remedy, right, power accruing upon an Event of Default, or the granting of any indulgence or compromise by the Lender shall impair any such remedy, right or power hereunder or be construed as a waiver thereof, but any such remedy, right or power may be exercised from time to time and as often as may be deemed expedient. A waiver of one Potential Default or Event of Default shall not be construed to be a waiver of any subsequent Potential Default or Event of Default or to impair any remedy, right or power consequent thereon. Notwithstanding any other provision of this Citi Loan Agreement, the Lender reserves the right to seek a deficiency judgment or preserve a deficiency claim, in connection with the foreclosure of the Subordinate Security Instrument to the extent necessary to foreclose on other part of the Mortgaged Property, the Rents, the funds or any other collateral.

Section 5.2.4 Set Off; Waiver of Set Off. Upon the occurrence of an Event of Default, Lender may, at any time and from time to time, without notice to Borrower or any other Person (any such notice being expressly waived), set off and appropriate and apply (against and on account of any obligations and liabilities of Borrower to Lender arising under or connected with this Citi Loan Agreement and the other Citi Loan Documents, irrespective of whether or not Lender shall have made any demand therefor, and although such obligations and liabilities may be contingent or unmatured).

Section 5.2.5 [Reserved].
Section 5.2.6 Accounts Receivable. Upon the occurrence of an Event of Default, Lender shall have the right, to the extent permitted by law, to impound and take possession of books, records, notes and other documents evidencing the Project Owner’s accounts, accounts receivable and other claims for payment of money, arising in connection with the Mortgaged Property or the Project, and to make direct collections on such accounts, accounts receivable and claims for the benefit of Lender.

Section 5.2.7 Defaults under Other Documents. Lender shall have the right to cure any default under any of the Related Documents but shall have no obligation to do so.

Section 5.2.8 Compliance With QAP. It is the intent of the parties to strictly comport with the applicable provisions of the 2015 Qualified Allocation Plan, including that the Project Owner and the Guarantor provide collateral or guarantees only for the Project Owner Subordinate Loan to Borrower. Nothing herein shall create a direct obligation from the Project Owner to the Lender. Lender and Project Owner represent and warrant to Borrower that neither Project Owner nor any related Party of Project Owner has provided any collateral or guarantee to Lender for the Project Owner Subordinate Loan.

Section 5.2.9 Cure Rights. Notwithstanding any provision herein or in any of the other Citi Loan Documents to the contrary, the Lender agrees that any cure of any default under any of the Citi Loan Documents made or tendered by the Project Owner or RBC Tax Credit Equity, LLC, shall be deemed to be a cure by the Borrower and shall be accepted or rejected on the same basis as if made or tendered by the Borrower.

ARTICLE VI

MISCELLANEOUS

Section 6.1. Notices. All notices, consents, approvals and requests required or permitted hereunder or under any other Loan Document (a “notice”) shall be deemed to be given and made when delivered by hand, by recognized overnight delivery service, confirmed facsimile transmission (provided any telecopy or other electronic transmission received by any party after 4:00 p.m., local time, as evidenced by the time shown on such transmission, shall be deemed to have been received the following Business Day), or five (5) calendar days after deposited in the United States mail, registered or certified, postage prepaid, with return receipt requested, addressed as follows:

To Borrower: New Braunfels Industrial Development Corporation
424 South Castell Avenue
New Braunfels, Texas 78130

With a copy to:

Attn: James P. Plummer
Norton Rose Fulbright US LLP
300 Convent Street, Suite 2100
San Antonio, Texas 78205-3792
If to Project Owner: Reserve at Engel Road, LLC
9349 WaterStone Blvd., Suite 200
Cincinnati, Ohio 45249
Attn: Michael Riechman and Elizabeth A. Mangan

With a copy to: Dinsmore & Shohl LLP
One S. Main Street, #1300
Dayton, Ohio 45402
Attention: Fred Caspar

And with a copy to: Locke Lord LLP
600 Congress Avenue, #2200
Austin, Texas 78701
Attention: Rick Morrow

And a copy to: RBC Tax Credit Equity, LLC
600 Superior Avenue, Suite 2300
Cleveland, Ohio 44114
Attention: President and General Counsel

And a copy to: Kutak Rock
1650 Farnam Street
Omaha, Nebraska 68102
Attention: Robert Coon

If to Lender: Citibank, N.A.
390 Greenwich Street, 2nd Floor
New York, New York 10013
Attention: Account Specialist
Deal ID # 23831
Facsimile: (212) 723-8209

Citibank, N.A.
325 East Hillcrest Drive, Suite 160
Thousand Oaks, California 91360
Attention: Operations Manager/Asset Manager
Deal ID #: 23831
Facsimile: (805) 557-0924

Prior to the Conversion Date:

Citibank, N.A.
390 Greenwich Street, 2nd Floor
New York, New York 10013
Attention: Account Specialist
Deal ID # 23831
Facsimile: (212) 723-8209
Following the Conversion Date:
Citibank, N.A.
c/o Berkadia Commercial Servicing Department
323 Norristown Road, Suite 300
Amber, PA 19002
Attention: Client Relations Manager
Deal ID # 23831
Facsimile: (215) 328-0305

And a copy of any notices of default sent to:
Citibank, N.A.
388 Greenwich Street
New York, New York 10013
Attention: General Counsel’s Office
Deal ID No. 23831
Facsimile: (646) 291-5754

Any party may change such party’s address for the notice or demands required under this Citi Loan Agreement by providing written notice of such change of address to the other parties by written notice as provided herein.

Section 6.2. Brokers and Financial Advisors. The Borrower hereby represents that it has dealt with no financial advisors, brokers, underwriters, placement agents, agents or finders in connection with the Citi Loan, other than those disclosed to the Lender and whose fees shall be paid by the Borrower pursuant to separate agreements. The Borrower and the Lender shall indemnify and hold the other harmless from and against any and all claims, liabilities, costs and expenses of any kind in any way relating to or arising from a claim by any Person that such Person acted on behalf of the indemnifying party in connection with the transactions contemplated herein. The provisions of this Section 6.2 shall survive the expiration and termination of this Citi Loan Agreement and the repayment of the Borrower Subordinate Payment Obligations.

Section 6.3. Survival. This Citi Loan Agreement and all covenants, agreements, representations and warranties made herein and in the certificates delivered pursuant hereto shall survive the making by the Lender of the Citi Loan and the execution and delivery to the Lender of the Citi Note, and shall continue in full force and effect so long as all or any of the Borrower Subordinate Payment Obligations. All the Borrower’s covenants and agreements in this Citi Loan Agreement shall inure to the benefit of the respective legal representatives, successors and assigns of the Lender and the Servicer.

Section 6.4. Preferences. The Lender shall have the continuing and exclusive right to apply or reverse and reapply any and all payments by the Borrower to any portion of the Borrower Subordinate Payment Obligations. To the extent the Borrower makes a payment to the Lender or the Servicer, or the Lender or the Servicer receives proceeds of any collateral, which is in whole or part subsequently invalidated, declared to be fraudulent or preferential, set aside or required to be repaid to a trustee, receiver or any other party under any bankruptcy law, state or federal law, or law of equity, the Lender or the Servicer shall apply such payment or funds received on account of the Borrower Subordinate Payment Obligations, to the extent of such obligation, in the order of priority specified in this Section 6.4.
federal law, common law or equitable cause, then, to the extent of such payment or proceeds received, the Borrower Subordinate Payment Obligations or part thereof intended to be satisfied shall be revived and continue in full force and effect, as if such payment or proceeds had not been received by the Lender or the Servicer.

Section 6.5.  [RESERVED].

Section 6.6.  [RESERVED].

Section 6.7.  Publicity. The Lender and the Servicer (and any Affiliates of either party) shall have the right to issue press releases, advertisements and other promotional materials describing the Lender’s or the Servicer’s participation in the making of the Citi Loan. All news releases, publicity or advertising by the Borrower or its Affiliates through any media intended to reach the general public, which refers to the Citi Loan Documents, the Citi Loan, or the Lender shall be subject to the prior Written Consent of the Lender or the Servicer, as applicable.

Section 6.8.  Construction of Documents. The parties hereto acknowledge that they were represented by counsel in connection with the negotiation and drafting of the Citi Loan Documents and that the Citi Loan Documents shall not be subject to the principle of construing their meaning against the party that drafted them.

Section 6.9.  No Third Party Beneficiaries. The Citi Loan Documents are solely for the benefit of the Lender, the Servicer and the Borrower and nothing contained in any Citi Loan Document shall be deemed to confer upon anyone other than the Lender, the Servicer, and the Borrower any right to insist upon or to enforce the performance or observance of any of the obligations contained therein.

Section 6.10.  Assignment. The Citi Loan, the Subordinate Security Instrument, the Citi Loan Documents and all Lender’s rights, title, obligations and interests therein may be assigned by the Lender, at any time in its sole discretion, whether by operation of law (pursuant to a merger or other successor in interest) or otherwise. Upon such assignment, all references to Lender in this Citi Loan Agreement and in any Citi Loan Document shall be deemed to confer upon anyone other than the Lender, the Servicer, and the Borrower any right to insist upon or to enforce the performance or observance of any of the obligations contained therein.

In connection with any proposed assignment, Lender may disclose to the proposed assignee any information that Borrower has delivered, or caused to be delivered, to Lender with reference to Borrower, including information that Borrower is required to deliver to Lender pursuant to this Citi Loan Agreement, provided that such proposed assignee agrees to treat such information as confidential. The Borrower may not assign its rights, interests or obligations under this Citi Loan Agreement or under any of the Citi Loan Documents, or Borrower’s interest in any moneys to be disbursed or advanced hereunder, except only as may be expressly permitted hereby.
deemed to, give the Lender or the Servicer the right or power to exercise control over the affairs or management of the Borrower, the power of the Lender and the Servicer being limited to the rights to exercise the remedies referred to in the Citi Loan Documents. The relationship between the Borrower and the Lender and the Servicer is, and at all times shall remain, solely that of debtor and creditor. No covenant or provision of the Citi Loan Documents is intended, nor shall it be deemed or construed, to create a partnership, joint venture, agency or common interest in profits or income between the Borrower and the Lender or the Servicer. Neither the Lender nor the Servicer undertakes or assumes any responsibility or duty to the Borrower or to any other person with respect to the Citi Loan, except as expressly provided in the Citi Loan Documents; and notwithstanding any other provision of the Citi Loan Documents: (1) the Lender and the Servicer are not, and shall not be construed as, a partner, joint venturer, alter ego, manager, controlling person or other business associate or participant of any kind of the Borrower or its stockholders, members, or partners and the Lender and the Servicer do not intend to ever assume such status; (2) the Lender and the Servicer shall in no event be liable for any the Borrower Subordinate Payment Obligations, expenses or losses incurred or sustained by the Borrower; and (3) the Lender and the Servicer shall not be deemed responsible for or a participant in any acts, omissions or decisions of the Borrower, the Borrower Controlling Entities or its stockholders, members, or partners. The Lender and the Servicer and the Borrower disclaim any intention to create any partnership, joint venture, agency or common interest in profits or income between the Lender, the Servicer and the Borrower, or any sharing of liabilities, losses, costs or expenses.

Section 6.12. Release. The Borrower hereby acknowledges that it is executing this Citi Loan Agreement and each of the Citi Loan Documents to which it is a party as its own voluntary act free from duress and undue influence.

Section 6.13. Term of Citi Loan Agreement. This Citi Loan Agreement shall be in full force and effect until all payment obligations of the Borrower hereunder have been paid in full or the payment thereof has been provided for; except that on and after payment in full of the Citi Note, this Citi Loan Agreement shall be terminated, without further action by the parties hereto.

Section 6.14. [Reserved].

Section 6.15. Relationships with Other Customers. From time to time, Lender may have business relationships with Borrower’s customers, suppliers, contractors, tenants, members, partners, shareholders, officers or directors, or with businesses offering products or services similar to those of Borrower, or with Persons seeking to invest in, borrow from or lend to Borrower. Borrower agrees that Lender may extend credit to such parties and may take any action it may deem necessary to collect the credit, regardless of the effect that such extension or collection of credit may have on Borrower’s financial condition or operations. Borrower further agrees that in no event shall Lender be obligated to disclose to Borrower any information concerning any other customer.

Section 6.16. Permitted Contests. Notwithstanding anything to the contrary contained in this Citi Loan Agreement, Borrower shall have the right to contest or object in good faith to any claim, demand, levy or assessment (other than in respect of Debt or Contractual Obligations of Borrower under any Citi Loan Document or Related Document) by appropriate
legal proceedings that are not prejudicial to Lender’s rights, but this shall not be deemed or construed as in any way relieving, modifying or providing any extension of time with respect to Borrower’s covenant to pay and comply with any such claim, demand, levy or assessment, unless Borrower shall have given prior written notice to Lender of Borrower’s intent to so contest or object thereto, and unless (i) Borrower has, in Lender’s judgment, a reasonable basis for such contest, (ii) Borrower pays when due any portion of the claim, demand, levy or assessment to which Borrower does not object, (iii) Borrower demonstrates to Lender’s satisfaction that such legal proceedings shall conclusively operate to prevent enforcement prior to final determination of such proceedings, (iv) Borrower furnishes such bond, surety, undertaking or other security in connection therewith as required by law, or as requested by and satisfactory to Lender, to stay such proceeding, which bond, surety, undertaking or other security shall be issued by a bonding company, insurer or surety company reasonably satisfactory to Lender and shall be sufficient to cause the claim, demand, levy or assessment to be insured against by the Title Company or removed as a lien against the Mortgaged Property, (v) Borrower at all times prosecutes the contest with due diligence, and (vi) Borrower pays, promptly following a determination of the amount of such claim, demand, levy or assessment due and owing by Borrower, the amount so determined to be due and owing by Borrower. In the event that Borrower does not make, promptly following a determination of the amount of such claim, demand, levy or assessment due and owing by Borrower, any payment required to be made pursuant to clause (vi) of the preceding sentence, an Event of Default shall have occurred, and Lender may draw or realize upon any bond or other security delivered to Lender in connection with the contest by Borrower, in order to make such payment.

Section 6.17. Lender Approval of Instruments and Parties. All proceedings taken in accordance with transactions provided for herein, and all documents required or contemplated by this Citi Loan Agreement and the persons responsible for the execution and preparation thereof, shall be satisfactory to and subject to approval by Lender. No such approval shall result in a waiver of any default of Borrower. In no event shall Lender’s approval be a representation of any kind with regard to the matter being approved.

Section 6.18. Lender Determination of Facts. Lender shall at all times be free to establish independently, to its reasonable satisfaction, the existence or nonexistence of any fact or facts, the existence or nonexistence of which is a condition of this Citi Loan Agreement.

Section 6.19. Calendar Months. With respect to any payment or obligation that is due or required to be performed within a specified number of Calendar Months after a specified date, such payment or obligation shall become due on the day in the last of such specified number of Calendar Months that corresponds numerically to the date so specified; provided, however, that with respect to any obligation as to which such specified date is the 29th, 30th or 31st day of any Calendar Month: if the Calendar Month in which such payment or obligation would otherwise become due does not have a numerically corresponding date, such obligation shall become due on the first day of the next succeeding Calendar Month.

Section 6.20. Determinations by Lender. Except to the extent expressly set forth in this Citi Loan Agreement to the contrary, in any instance where the consent or approval of Lender may be given or is required, or where any determination, judgment or decision is to be rendered by Lender under this Citi Loan Agreement, the granting, withholding or denial of such
consent or approval and the rendering of such determination, judgment or decision shall be made or exercised by Lender, as applicable (or its designated representative) at its sole and exclusive option and in its sole and absolute discretion.

Section 6.21. Governing Law. This Citi Loan Agreement shall be governed by and enforced in accordance with the laws of the Property Jurisdiction, without giving effect to the choice of law principles of the Property Jurisdiction that would require the application of the laws of a jurisdiction other than the Property Jurisdiction.

Section 6.22. Consent to Jurisdiction and Venue. Borrower and Lender agree that any controversy arising under or in relation to this Citi Loan Agreement shall be litigated exclusively in the Property Jurisdiction. The state and federal courts and authorities with jurisdiction in the Property Jurisdiction shall have exclusive jurisdiction over all controversies which shall arise under or in relation to this Citi Loan Agreement. Borrower and Lender irrevocably consent to service, jurisdiction, and venue of such courts for any such litigation and waives any other venue to which it might be entitled by virtue of domicile, habitual residence or otherwise.

Section 6.23. Successors and Assigns. This Citi Loan Agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective heirs, legal representatives, successors, successors-in-interest and assigns, as appropriate. The terms used to designate any of the parties herein shall be deemed to include the heirs, legal representatives, successors, successors-in-interest and assigns, as appropriate, of such parties. References to a “person” or “persons” shall be deemed to include individuals and entities.

Section 6.24. Severability. The invalidity, illegality or unenforceability of any provision of this Citi Loan Agreement shall not affect the validity, legality or enforceability of any other provision, and all other provisions shall remain in full force and effect.

Section 6.25. Transfer of Mortgaged Property or Ownership Interests in Borrower. If a Transfer (as defined and permitted in the Subordinate Security Instrument) of all or part of the Mortgaged Property or of an ownership interest in Borrower, shall occur or be contemplated, which Transfer requires the prior written consent of Lender, the transferee(s) shall be required to assume Borrower’s duties and obligations under this Citi Loan Agreement and the other Citi Loan Documents and shall be required to execute and deliver to Lender such documents as Lender requires to effectuate such assumption of duties and obligations. No transfer and assumption shall relieve the transferor of any of its duties or obligations under this Citi Loan Agreement or any of the other Citi Loan Documents, unless the Borrower has obtained the prior written consent of Lender to the release of such duties and obligations.

Section 6.26. Entire Agreement; Amendment and Waiver. This Citi Loan Agreement contains the complete and entire understanding of the parties with respect to the matters covered. This Citi Loan Agreement may not be amended, modified or changed, nor shall any waiver of any provision hereof be effective, except by a written instrument signed by the party against whom enforcement of the waiver, amendment, change, or modification is sought, and then only to the extent set forth in that instrument. No specific waiver of any of the terms of
this Citi Loan Agreement shall be considered as a general waiver. Without limiting the
generality of the foregoing, no disbursement shall constitute a waiver of any conditions to
Lender’s obligation to make further disbursements nor, in the event Borrower is unable to satisfy
any such conditions, shall any such waiver have the effect of precluding Lender from thereafter
declaring such inability to constitute a Potential Default or Event of Default under this Citi Loan
Agreement.

Section 6.27. **Counterparts.** This Citi Loan Agreement may be executed in
multiple counterparts, each of which shall constitute an original document and all of which
together shall constitute one agreement.

Section 6.28. **Captions.** The captions of the sections of this Citi Loan
Agreement are for convenience only and shall be disregarded in construing this Citi Loan
Agreement.

Section 6.29. **Servicer.** Borrower hereby acknowledges and agrees that,
pursuant to the terms of the Subordinate Security Instrument: (a) from time to time, Lender may
appoint a servicer to collect payments, escrows and deposits, to give and to receive notices under
the Citi Note, this Citi Loan Agreement or the other Citi Loan Documents, and to otherwise
service the Citi Loan and (b) unless Borrower receives written notice from Lender to the
contrary, any action or right which shall or may be taken or exercised by Lender may be taken or
exercised by such servicer with the same force and effect.

Section 6.30. **Beneficiary Parties as Third Party Beneficiary.** Each of the
Beneficiary Parties shall be a third party beneficiary of this Citi Loan Agreement for all
purposes.

Section 6.31. **Waiver of Trial by Jury.** TO THE MAXIMUM EXTENT
PERMITTED UNDER APPLICABLE LAW, EACH OF BORROWER AND THE
BENEFICIARY PARTIES (A) COVENANTS AND AGREES NOT TO ELECT A TRIAL BY
JURY WITH RESPECT TO ANY ISSUE ARISING OUT OF THIS CITI LOAN
AGREEMENT OR THE RELATIONSHIP BETWEEN THE PARTIES THAT IS TRIABLE OF
RIGHT BY A JURY AND (B) WAIVES ANY RIGHT TO TRIAL BY JURY WITH RESPECT
to such issue to the extent that any such right exists now or in the
future. THIS WAIVER OF RIGHT TO TRIAL BY JURY IS SEPARATELY GIVEN BY
EACH PARTY, KNOWINGLY AND VOLUNTARILY WITH THE BENEFIT OF
COMPETENT LEGAL COUNSEL. IF THIS PROVISION IS DEEMED UNENFORCEABLE
FOR ANY REASON ANY SUCH DISPUTES SHALL BE RESOLVED PURSUANT TO
JUDICIAL REFERENCE ACCORDING TO THE PROVISIONS OF THE SUBORDINATE
SECURITY INSTRUMENT.

Section 6.32. **Time of the Essence.** Time is of the essence with respect to this
Citi Loan Agreement.
ARTICLE VII

LIMITATIONS ON LIABILITY

Section 7.1.  Limitation on Liability.  Notwithstanding anything to the contrary herein, the liability of the Borrower hereunder and under the other Citi Loan Documents shall be limited to the extent set forth in the Citi Note, which is incorporated by reference herein and made a part hereof.

Section 7.2.  Limitation on Liability of Lender’s Officers, Employees, Etc.

(a)  Borrower assumes all risks of the acts or omissions of Lender, provided, however, this assumption is not intended to, and shall not, preclude Borrower from pursuing such rights and remedies as it may have against Lender at law or under any other agreement.  None of Lender, the other Beneficiary Parties, or any of their respective officers, directors, employees or agents shall be liable or responsible for (i) any acts or omissions of Lender; or (ii) the validity, sufficiency or genuineness of any documents, or endorsements, even if such documents should in fact prove to be in any or all respects invalid, insufficient, fraudulent or forged.  In furtherance and not in limitation of the foregoing, Lender may accept documents that appear on their face to be in order, without responsibility for further investigation, regardless of any notice or information to the contrary, unless acceptance in light of such notice or information constitutes gross negligence or willful misconduct on the part of Lender.

(b)  None of Lender, the other Beneficiary Parties, or any of their respective officers, directors, employees or agents shall be liable (i) to any contractor, subcontractor, supplier, laborer, architect, engineer or any other party for services performed or materials supplied in connection with the Mortgaged Property or the Project or (ii) for any debts or claims accruing in favor of any such parties against Borrower or others or against the Mortgaged Property or the Project.  Borrower is not and shall not be an agent of Lender for any purpose.  Lender is not a joint venture partner with Borrower in any manner whatsoever.  Prior to default by Borrower under this Citi Loan Agreement and the exercise of remedies granted herein, Lender shall not be deemed to be in privity of contract with any contractor or provider of services to the Mortgaged Property or for the Project, nor shall any payment of funds directly to a contractor, subcontractor or provider of services be deemed to create any third party beneficiary status or recognition of same by Lender.  Approvals granted by Lender for any matters covered under this Citi Loan Agreement shall be narrowly construed to cover only the parties and facts identified in any written approval or, if not in writing, such approvals shall be solely for the benefit of Borrower.

(c)  Any obligation or liability whatsoever of the Lender that may arise at any time under this Citi Loan Agreement or any other Citi Loan Document shall be satisfied, if at all, out of the Lender’s assets only.  No such obligation or liability shall be personally binding upon, nor shall resort for the enforcement thereof be had to, the Mortgaged Property or any of the Lender’s shareholders, directors, officers, employees or agents, regardless of whether such obligation or liability is in the nature of contract, tort or otherwise.

Section 7.3.  Delivery of Reports, Etc.  The delivery of reports, information and documents to the Lender as provided herein is for informational purposes only and the
Lender’s receipt of such shall not constitute constructive knowledge of any information contained therein or determinable from information contained therein. The Lender shall have no duties or responsibilities except those that are specifically set forth herein, and no other duties or obligations shall be implied in this Citi Loan Agreement against the Lender.

**Section 7.4. Loan Data.** All inspections, reports, appraisals, environmental studies or other data submitted to, commissioned for, conducted or produced by or for Lender are for its benefit and use and shall be the property of Lender. No right of inspection or approval contained in the Citi Loan Documents shall be deemed to impose upon Lender any duty or obligation whatsoever to take any action or to notify any person with respect thereto, and no liability shall be imposed upon any such party and no warranty shall be deemed or construed to arise by reason of any inspection undertaken or approval given by any such party, its agents, employees or representatives, any such inspections and approvals being made solely for the benefit of such party.

[Remainder of Page Intentionally Left Blank]
IN WITNESS WHEREOF, the undersigned has duly executed and delivered this Citi Loan Agreement or caused this Citi Loan Agreement to be duly executed and delivered by its authorized representative as of the date first set forth above. The undersigned intends that this instrument shall be deemed to be signed and delivered as a sealed instrument.

BORROWER:

NEW BRAUNFELS INDUSTRIAL DEVELOPMENT CORPORATION, a nonprofit corporation

By: ________________________________
Name: ______________________________
Title: _______________________________
PROJECT OWNER:

RESERVE AT ENGEL ROAD, LLC
a Texas limited liability company
By: MV Reserve at Engel Road LLC
    an Ohio limited liability company
Its: Managing Member
    By: MV Affordable Housing LLC
    an Ohio limited liability company
    Its: Sole Member

By: __________________________
    Print Name: Elizabeth A. Mangan
    Title: Authorized Signer
LENDER:

CITIBANK, N.A.

By: _________________________________
Name: _______________________________
Title: _______________________________
Citi Note

$833,000.00 March __, 2016

FOR VALUE RECEIVED, the undersigned (“Borrower”) promises to pay to the order of CITIBANK, N.A., a national banking association, the maximum principal sum of EIGHT HUNDRED THIRTY-THREE THOUSAND AND NO/100 DOLLARS $833,000.00, with interest on the unpaid principal balance from time to time outstanding at the annual rate as set forth on Schedule A. The terms of this Note incorporate the Modifications, if any, set forth on Schedule C to this Note.

1. Defined Terms. As used in this Note, the following terms shall have the following definitions:

(a) “Beneficiary Parties” shall have the meaning set forth in the Subordinate Security Instrument.

(b) “Business Day” means any day other than (i) a Saturday or a Sunday, or (ii) a day on which federally insured depository institutions in New York, New York are authorized or obligated by law, regulation, governmental decree or executive order to be closed.

(c) “Citi Loan” means the loan evidenced by this Note.

(d) “Collateral Assignment of Loan” means the Collateral Assignment of Loan of even date herewith from Borrower to Lender.

(e) “Conversion Date” has the meaning assigned to that term in the Senior Loan Agreement.

(f) “Default Rate” shall have the meaning set forth in Section 8 of this Note.

(g) “First Payment Date” means the first day of the calendar month immediately following the calendar month in which the Conversion Date occurs.

(h) “Indebtedness” means the principal of, interest on, and any other amounts due at any time under, this Note and the Collateral Assignment of Loan.

(i) “Interest Rate” shall have the meaning set forth in Paragraph 1 of Schedule A to this Note.

(j) “Lender” means Citibank, N.A. and any subsequent holder of this Note.
“Loan Agreement” means that certain Loan Agreement dated March __, 2016, among Project Owner, Borrower and Lender.

“Loan Month” means the period commencing on a Loan Payment Date and ending on the day preceding the next succeeding Loan Payment Date (without adjustment in either case for Business Day conventions).

“Loan Payment Date” means the first Business Day of each month, commencing on the First Payment Date.

“Lock-Out Period” means the period commencing on the date of this Note and ending six (6) calendar months preceding on the fifteenth (15th) anniversary of the Conversion Date.

“Maturity Date” means the earlier to occur of (i) the date which is fifteen (15) years following the Conversion Date, or (ii) any earlier date on which the unpaid principal balance of this Note becomes due and payable, by acceleration or otherwise.

“Maximum Rate” means the maximum interest rate that may be paid on the Citi Loan under State law.

“Note” means this Citi Note.

“Note Interest” shall have the meaning set forth in Paragraph 1 of Schedule A to this Note.

“Prepayment Premium Period” commencing on the date of this Note and ending six (6) calendar months preceding the fifteenth (15th) anniversary of the Conversion Date.

“Project Owner” means Reserve at Engel Road, LLC, a Texas limited liability company.

“Property Jurisdiction” shall have the meaning set forth in the Subordinate Security Instrument.

“Written Notice” shall mean a written consent or notice signed by an authorized representative of Borrower or an authorized representative of the Lender, as appropriate.

All other capitalized terms used but not defined in this Note shall have the meanings given to such terms in the Loan Agreement.

2. **Method of Payment.** All payments due under this Note shall be payable to Servicer, or, if there is no Servicer, to the Lender, or its successor. Each such payment shall be made by wire transfer of immediately available funds in accordance with wire transfer instructions that the Lender or Servicer shall supply by Written Notice to the Borrower from time to time.
3. **Payment of Principal and Interest.** Principal and interest shall be paid as follows:

   (a) Borrower shall pay all amounts due under this Note at the times and in the amounts set forth herein. Borrower shall make its payments under this Note in immediately available funds.

   (b) Borrower shall pay monthly payments of principal and interest as set forth on Schedule A attached hereto in successive monthly installments commencing on the First Payment Date and continuing on each Loan Payment Date thereafter until and including the Maturity Date. Such payments shall be made to the Lender or the Servicer by 2:00 p.m., New York City time, on each Loan Payment Date.

   (c) Any accrued interest remaining past due may, at Lender’s discretion, be added to and become part of the unpaid principal balance and shall bear interest at the rate or rates specified in this Note, and any reference below to “accrued interest” shall refer to accrued interest that has not become part of the unpaid principal balance.

   (d) Borrower shall pay all unpaid principal of and interest on this Note on the Maturity Date and any other amounts due under subsection 3(a) hereof.

   (e) Any regularly scheduled monthly installment of principal and interest that is received by Lender before the date it is due shall be deemed to have been received on the due date solely for the purpose of calculating interest due.

   (f) Borrower shall make all payments of principal and interest under this Note without relief from valuation and appraisement laws.

   (g) Borrower acknowledges that the calculation of all interest payments shall be made by the Lender and shall be final and conclusive, absent manifest error.

4. **Application of Payments.** If at any time Lender receives, from Borrower or otherwise, any amount applicable to the Indebtedness which is less than all amounts due and payable at such time, Lender may apply that payment to amounts then due and payable under this Note in any manner and in any order determined by Lender, in Lender’s discretion. Borrower agrees that neither Lender’s acceptance of a payment from Borrower in an amount that is less than all amounts then due and payable nor Lender’s application of such payment shall constitute or be deemed to constitute either a waiver of the unpaid amounts or an accord and satisfaction.

5. **Security.** The Indebtedness is secured by the grant of the security interest contained in the Loan Agreement and the Collateral Assignment of Loan and reference is made to the Collateral Assignment of Loan for other rights of Lender as to collateral for the Indebtedness.

6. **Acceleration.** If an Event of Default has occurred and is continuing, the entire unpaid principal balance, any accrued interest, the prepayment premium payable under Section 10, if any, and all other amounts payable under this Note and any other Citi Loan
Document shall at once become due and payable, at the option of Lender, without any prior notice to Borrower (except if notice is required by applicable law, then after such notice). Lender may exercise this option to accelerate regardless of any prior forbearance.

7. **Late Charge.** If any amount payable under this Note or under the Subordinate Security Instrument or any other Citi Loan Document is not received by Lender when such amount is due (unless applicable law requires a longer period of time before a late charge may be imposed, in which event, such longer period shall be substituted), Borrower shall pay to Lender, immediately and without demand by Lender, a late charge equal to five percent (5.0%) of such amount (unless applicable law requires a lesser amount be charged, in which event such lesser amount shall be substituted). Notwithstanding the foregoing, with regard to each regularly scheduled monthly installment of principal and interest payable pursuant to this Note, such late charge shall not become due and payable to Lender so long as the Borrower makes such payment on or prior to the tenth (10th) calendar day following the date upon which such payment is due (or the Business Day immediately following such tenth (10th) calendar day if such tenth (10th) calendar day is not a Business Day). Any accrued but unpaid late charges shall be added to and become part of the unpaid principal balance of this Note, shall bear interest at the rate or rates specified in this Note, and shall be secured by the Collateral Assignment of Loan and the other applicable Citi Loan Documents. Borrower acknowledges that its failure to make timely payments will cause Lender to incur additional expenses in servicing and processing the Citi Loan, and that it is extremely difficult and impractical to determine those additional expenses. Borrower agrees that the late charge payable pursuant to this Section represents a fair and reasonable estimate, taking into account all circumstances existing on the date of this Note, of the additional expenses Lender will incur by reason of such late payment, and such late charge shall be deemed liquidated damages and not additional interest or a penalty. The late charge is payable in addition to, and not in lieu of, any interest payable at the Default Rate pursuant to Section 8. Notwithstanding anything to the contrary in any other Citi Loan Document, if a Servicer has been appointed by Lender, any late charges payable hereunder shall not be remitted to Lender and shall instead be paid directly to Servicer, who shall apply such late charges in accordance with the terms of the applicable servicing agreement. Any action regarding the collection of a Late Charge will be without prejudice to any other rights, and shall not act as a waiver of any other rights, that the Servicer or the Lender may have as provided herein, in the other Citi Loan Documents, or at law or in equity.

8. **Default Rate.** So long as (a) any monthly installment under this Note remains past due, or (b) any other Event of Default has occurred and is continuing, interest under this Note shall accrue on the unpaid principal balance from the earlier of the due date of the first unpaid monthly installment or the occurrence of such other Event of Default, as applicable, at a rate per annum (the “Default Rate”) equal to the lesser of the Maximum Rate or a rate equal to the Interest Rate plus four percent (4%), in each case compounded monthly (computed in accordance with Schedule A in the same manner in which Note Interest is computed). If the unpaid principal balance and all accrued interest are not paid in full on the Maturity Date, the unpaid principal balance and all accrued interest shall bear interest from the Maturity Date at the Default Rate. Borrower also acknowledges that its failure to make timely payments will cause Lender to incur additional expenses in servicing and processing the Citi Loan, that, during the time that any monthly installment under this Note is delinquent, Lender will incur additional costs and expenses arising from its loss of the use of the money due and from the adverse impact
on Lender’s ability to meet its other obligations and to take advantage of other investment
opportunities, and that it is extremely difficult and impractical to determine those additional costs
and expenses. Borrower also acknowledges that, during the time that any monthly installment
under this Note is delinquent or any other Event of Default has occurred and is continuing,
Lender’s risk of nonpayment of this Note will be materially increased and Lender is entitled to
be compensated for such increased risk. Borrower agrees that the increase in the rate of interest
payable under this Note to the Default Rate as provided above represents a fair and reasonable
estimate, taking into account all circumstances existing on the date of this Note, of the additional
costs and expenses Lender will incur by reason of Borrower’s delinquent payment and the
additional compensation Lender is entitled to receive for the increased risks of nonpayment
associated with a delinquent loan.

9. **Personal Liability of Borrower.**

   (a) Notwithstanding anything to the contrary herein or the other Citi Loan
Documents, Lender shall not enforce the liability and obligation of Borrower to perform
and observe the obligations contained in this Note, the Collateral Assignment of Loan or
the other Citi Loan Documents by any action or proceeding wherein a money judgment
shall be sought against Borrower, except that Lender may bring a foreclosure action, an
action for specific performance or, subject to the limitations below, any other appropriate
action or proceeding under the Collateral Assignment of Loan to enable Lender to
enforce and realize upon its interest under this Note, the Citi Loan Documents, in the
Mortgaged Property, or any other collateral given to Lender pursuant to the other Citi
Loan Documents; provided, however, that, except as specifically provided herein, any
judgment in any such action or proceeding shall be enforceable against Borrower only to
the extent of Borrower's interest in the Project Owner Subordinate Loan, and Lender, by
accepting this Note, the Collateral Assignment of Loan and the other Citi Loan
Documents, agrees that it shall not sue for, seek or demand any deficiency judgment or
personal liability against Borrower in any such action or proceeding under or by reason of
or under or in connection with this Note, the Collateral Assignment of Loan or the other
Citi Loan Documents. The provisions of this paragraph shall not, however, (a) constitute
a waiver, release or impairment of any obligation evidenced or secured by this Note, the
Collateral Assignment of Loan or any of the other Citi Loan Documents; (b) impair the
right of Lender to name Borrower as a party defendant in any action or suit for
foreclosure and sale under the Collateral Assignment of Loan; or (c) impair the
enforcement of the Collateral Assignment of Loan in connection herewith.
Notwithstanding anything to the contrary in any of the Citi Loan Documents, neither
Borrower, nor any of its sponsors, board members, and/or managers shall have any
personal liability under the Citi Loan Documents for the repayment of the Indebtedness
or for the performance of any other obligations of Borrower. Lender’s only recourse
against Borrower for the satisfaction of the Indebtedness and the performance of the
obligations set forth herein shall be Lender’s exercise of its rights and remedies with
respect to the Collateral Assignment of Loan and any other collateral held by Borrower as
security for the Project Owner Subordinate Note. This limitation on Borrower’s liability
shall not limit or impair Lender’s enforcement of its rights against any guarantor of the
Indebtedness. The Borrower shall not be obligated to pay any fee, penalty, costs, or the
principal and interest on this Note, except from the proceeds of payments it receives on
the Project Owner Subordinate Note. Neither the full faith and credit, nor the taxing power of the Borrower or the City of New Braunfels, Texas is pledged or available for the payment of the Indebtedness. Notwithstanding any other provision in the Citi Loan Documents, Borrower shall have no liability except from amounts received pursuant to that certain Multifamily Permanent Subordinate Note from Reserve at Engel Road, LLC to Borrower dated as of the date hereof in the original principal amount of $833,000.00 (the “Collateral Note”), the Collateral Assignment of Loan or any other lien or security interest granted in connection with the Collateral Note or otherwise securing the Collateral Note.

(b) Nothing herein or in the other Citi Loan Documents shall be deemed to be a waiver of any right which the Lender or the Servicer may have under Sections 506(a), 506(b), 1111(b) or any other provision of the United States Bankruptcy Code, as such sections may be amended, or corresponding or superseding sections of the Bankruptcy Amendments and Federal Judgeship Act of 1984, to file a claim for the full amount due to the Lender and the Servicer hereunder and under the other Citi Loan Documents or to require that all collateral shall continue to secure the amounts due hereunder and under the other Citi Loan Documents.

10. Voluntary and Involuntary Prepayments.

(a) In connection with any prepayment (i.e., any receipt by Lender of principal, other than principal required to be paid in monthly installments pursuant to Section 3, prior to the Maturity Date) made under this Note, whether voluntary or involuntary, a prepayment premium shall be payable to the extent provided below.

(b) NO VOLUNTARY PREPAYMENTS OF THIS NOTE, IN WHOLE OR IN PART, SHALL BE PERMITTED DURING THE LOCK-OUT PERIOD. After the Lock-Out Period, Borrower may voluntarily prepay all (but not less than all) of the unpaid principal balance of this Note on any Loan Payment Date if: (i) Borrower has given Lender prior Written Notice of its intention to make such prepayment at least twenty (20) days prior to the proposed prepayment date (or such shorter time as agreed to by Lender in its sole discretion) and (ii) Borrower pays (A) the amount of principal being prepaid, (B) all accrued interest, (C) prior to the end of the Prepayment Premium Period, the prepayment premium calculated pursuant to Schedule B, and (D) all other sums due Lender at the time of such prepayment. If Lender, in Lender’s sole and absolute discretion, agrees in writing to waive the foregoing provision and allow a prepayment during the Lock-Out Period, a prepayment premium calculated pursuant to Schedule B shall be due and payable by Borrower. In connection with any prepayment pursuant to this Section 10(b), the Borrower shall wire transfer the amount required hereunder in immediately available funds by 2:00 p.m., New York City time, on the date of prepayment. For all purposes including the accrual of interest, any prepayment received by Lender on any day other than the last calendar day of a Loan Month shall be deemed to have been received on the last calendar day of such Loan Month.

(c) Upon Lender’s exercise of any right of acceleration under this Note, Borrower shall pay to Lender, in addition to the entire unpaid principal balance of this
Note outstanding at the time of the acceleration, (i) all accrued interest and all other sums due Lender, and (ii) if such acceleration occurs during the Prepayment Premium Period, the prepayment premium calculated pursuant to Schedule B.

(d) Any application by Lender of any collateral or other security to the repayment of any portion of the unpaid principal balance of this Note prior to the end of the Prepayment Premium Period and in the absence of acceleration shall be deemed to be a partial prepayment by Borrower, requiring the payment to Lender by Borrower of a prepayment premium, calculated pursuant to Schedule B.

(e) The Borrower shall prepay the outstanding principal balance of this Note at the direction of the Lender, in whole or in part, at a price equal to the outstanding principal balance of this Note, plus accrued interest plus any other amounts payable under this Note or the other Citi Loan Documents, upon the occurrence of any event or condition described below:

(1) in whole or in part, if the Mortgaged Property shall have been damaged or destroyed to the extent that it is not practicable or feasible to rebuild, repair or restore the damaged or destroyed property within the period and under the conditions described in the Subordinate Security Instrument following such event of damage or destruction; or

(2) in whole or in part, if title to, or the use of, all or a portion of the Mortgaged Property shall have been taken under the exercise of the power of eminent domain by any Governmental Authority which results in a prepayment of this Note under the conditions described in the Subordinate Security Instrument; or

(3) in whole or in part, to the extent that insurance proceeds or proceeds of any condemnation award with respect to the Mortgaged Property are not applied to restoration of the Mortgaged Property in accordance with the provisions of the Subordinate Security Instrument.

In connection with any such prepayment, the Borrower shall wire transfer immediately available funds by no later than 2:00 p.m., New York City time, on the date fixed by the Lender, which date shall be communicated by the Lender in writing to the Borrower. To the extent that the Borrower receives any insurance proceeds or condemnation awards that are to be applied to the prepayment of this Note, such amounts shall be applied to the prepayment of this Note. No prepayment premium shall be payable with respect to any prepayment required by this Section 10(e).

(f) Any permitted or required prepayment of less than the unpaid principal balance of this Note shall not extend or postpone the due date of any subsequent monthly installments or change the amount of such installments, unless Lender agrees otherwise in writing.

(g) Borrower recognizes that any prepayment of the unpaid principal balance of this Note, whether voluntary, involuntary or resulting from a default by Borrower, will
result in Lender’s incurring loss, including reinvestment loss, additional expense and frustration or impairment of Lender’s ability to meet its commitments to third parties. Borrower agrees to pay to Lender upon demand damages for the detriment caused by any prepayment, and agrees that it is extremely difficult and impractical to ascertain the extent of such damages. Borrower therefore acknowledges and agrees that the formula for calculating prepayment premiums set forth on Schedule B represents a reasonable estimate of the damages Lender will incur because of a prepayment.

(h) Borrower further acknowledges that the lock-out and prepayment premium provisions of this Note are a material part of the consideration for the Citi Loan, and acknowledges that the terms of this Note are in other respects more favorable to Borrower as a result of Borrower’s voluntary agreement to the Lock-Out Period and the prepayment premium provisions.

(i) Any prepayment premium payable hereunder shall be remitted to Servicer, or if a Servicer has not been appointed by Lender, to Lender.

11. **Costs and Expenses.** Subject to Section 9 herein, to the fullest extent allowed by applicable law, Borrower shall pay all expenses and costs, including, without limitation, out-of-pocket expenses and reasonable fees of attorneys (including, without limitation, in-house attorneys) and expert witnesses and costs of investigation, incurred by Lender as a result of any default under this Note or in connection with efforts to collect any amount due under this Note, or to enforce the provisions of any of the other Citi Loan Documents, including those incurred in post-judgment collection efforts and in any bankruptcy proceeding (including any action for relief from the automatic stay of any bankruptcy proceeding) or judicial or non-judicial foreclosure proceeding. For purposes of Section 9(e) and this Section 11, attorneys’ out of pocket expenses shall include, but are not limited to, support staff costs, costs of preparing for litigation, computerized research, telephone and facsimile transmission expenses, mileage, deposition costs, postage, duplicating, process service, videotaping and similar costs and expenses. Borrower’s obligation to pay the amounts under this Section is limited by Section 9.

12. **Forbearance.** Any forbearance by Lender in exercising any right or remedy under this Note, the Subordinate Security Instrument, or any other Citi Loan Document or otherwise afforded by applicable law, shall not be a waiver of or preclude the exercise of that or any other right or remedy. The acceptance by Lender of any payment after the due date of such payment, or in an amount which is less than the required payment, shall not be a waiver of Lender’s right to require prompt payment when due of all other payments or to exercise any right or remedy with respect to any failure to make prompt payment. Enforcement by Lender of any security for Borrower’s obligations under this Note shall not constitute an election by Lender of remedies so as to preclude the exercise of any other right or remedy available to Lender.

13. **Waivers.** Presentment, demand, notice of dishonor, protest, notice of acceleration, notice of intent to demand or accelerate payment or maturity, presentment for payment, notice of nonpayment, grace, and diligence in collecting the Indebtedness are waived by Borrower and all endorsers and guarantors of this Note and all other third party obligors.
14. **Loan Charges.** Neither this Note nor any of the other Citi Loan Documents shall be construed to create a contract for the use, forbearance or detention of money requiring payment of interest at a rate greater than the maximum interest permitted to be charged under applicable law. If any applicable law limiting the amount of interest or other charges permitted to be collected from Borrower in connection with the Citi Loan is interpreted so that any interest or other charge provided for in any Citi Loan Document, whether considered separately or together with other charges provided for in any other Citi Loan Document, violates that law, and Borrower is entitled to the benefit of that law, that interest or charge is hereby reduced to the extent necessary to eliminate that violation. The amounts, if any, previously paid to Lender in excess of the permitted amounts shall be applied by Lender to reduce the unpaid principal balance of this Note. For the purpose of determining whether any applicable law limiting the amount of interest or other charges permitted to be collected from Borrower has been violated, all Indebtedness that constitutes interest, as well as all other charges made in connection with the Indebtedness that constitute interest, shall be deemed to be allocated and spread ratably over the stated term of this Note. Unless otherwise required by applicable law, such allocation and spreading shall be effected in such a manner that the rate of interest so computed is uniform throughout the stated term of this Note.

15. **Obligations of the Borrower Absolute and Unconditional.** Subject to Section 9, the obligations of the Borrower to make all payments required under this Note and the other Citi Loan Documents on or before the date the same become due, and to perform all of its other obligations, covenants and agreements hereunder and under the other Citi Loan Documents shall be primary, absolute, unconditional and irrevocable, and shall be paid or performed strictly in accordance with the terms of this Note and the other Citi Loan Documents under any and all circumstances, without notice or demand (except as expressly required by the Citi Loan Documents), and without abatement, deduction, set-off, counterclaim, recoupment or defense or any right of termination or cancellation arising from any circumstance whatsoever, whether now existing or hereafter arising, and irrespective of whether the Project Owner’s title to the Mortgaged Property or to any part thereof is defective or nonexistent, and notwithstanding any damage due to loss, theft or destruction of the Mortgaged Property or any part thereof, any failure of consideration or frustration of commercial purpose, the taking by eminent domain of title to or of the right of temporary use of all or any part of the Mortgaged Property, legal curtailment of the Project Owner’s use thereof, the eviction or constructive eviction of the Borrower, any change in the tax or other laws of the United States of America, the State or any political subdivision thereof, any change in the Lender’s legal organization or status, or any default of the Lender hereunder or under any other Citi Loan Document, and regardless of the invalidity of any action of the Lender or the invalidity of any portion of this Note or the other Citi Loan Documents. Provided further, the obligations of Borrower under this Note and the other Citi Loan Documents shall not be affected by:

(a) any lack of validity or enforceability of any Citi Loan Document or any of the Related Documents;

(b) any amendment of, or any waiver or consent with respect to, any of the Citi Loan Documents or Related Documents;
(c) the existence of any claim, set-off, defense or other rights which Borrower or Project Owner may have at any time against Lender (other than the defense of payment in accordance with the terms of this Note or the other Citi Loan Documents) or any other Person, whether in connection with this Note or any other Citi Loan Document, the Related Documents or any transaction contemplated thereby or any unrelated transaction;

(d) any breach of contract or other dispute between Borrower or Project Owner, and Lender; or

(e) any exchange, release or nonperfection of any lien or security interest in any collateral pledged or otherwise provided to secure any of the obligations contemplated herein, in any other Citi Loan Document or in any Related Document.

The Borrower hereby waives the application to it of the provisions of any statute or other law now or hereafter in effect contrary to any of its obligations, covenants or agreements under this Note or the other Citi Loan Documents or which releases or purports to release the Borrower therefrom. Nothing contained herein shall be construed as prohibiting the Borrower from pursuing any rights or remedies it may have against any Person in a separate legal proceeding.

16. Commercial Purpose. Borrower represents that the Indebtedness is being incurred by Borrower solely for the purpose of carrying on a business or commercial enterprise, and not for personal, family, household or agricultural purposes.

17. Counting of Days. Except where otherwise specifically provided, any reference in this Note to a period of “days” means calendar days, not Business Days.

18. Notices. All notices, demands and other communications required or permitted to be given by Lender to Borrower pursuant to this Note shall be in writing, addressed as set forth below, and shall include a reference to “Citi Loan 23831.” Each notice shall be deemed given on the earliest to occur of (a) the date when the notice is received by the addressee; (b) the first Business Day after the notice is delivered to a recognized overnight courier service, with arrangements made for payment of charges for next Business Day delivery; or (c) the third Business Day after the notice is deposited in the United States mail with postage prepaid, certified mail, return receipt requested.

To Borrower: New Braunfels Industrial Development Corporation
424 South Castell Avenue
New Braunfels, Texas 78130

With a copy to: Attn: James P. Plummer
Norton Rose Fulbright US LLP
300 Convent Street, Suite 2100
San Antonio, Texas 78205-3792

If to Project Owner: Reserve at Engel Road, LLC
9349 WaterStone Blvd., Suite 200
Cincinnati, Ohio 45249
Attn: Michael Riechman and Elizabeth A. Mangan

With a copy to:
Dinsmore & Shohl LLP
One S. Main Street, #1300
Dayton, Ohio 45402
Attention: Fred Caspar

and a copy to:
Locke Lord LLP
600 Congress Avenue, #2200
Austin, Texas 78701
Attention: Rick Morrow

If to Lender:
Citibank, N.A.
390 Greenwich Street, 2nd Floor
New York, New York 10013
Attention: Account Specialist
Deal ID # 23831
Facsimile: (212) 723-8209

And to:

Citibank, N.A.
325 East Hillcrest Drive, Suite 160
Thousand Oaks, California 91360
Attention: Operations Manager/Asset Manager
Deal ID #: 23831
Facsimile: (805) 557-0924

Prior to the Conversion Date:
Citibank, N.A.
390 Greenwich Street, 2nd Floor
New York, New York 10013
Attention: Account Specialist
Deal ID # 23831
Facsimile: (212) 723-8209

Following the Conversion Date:
Citibank, N.A.
c/o Berkadia Commercial Servicing Department
323 Norristown Road, Suite 300
Amber, PA 19002
Attention: Client Relations Manager
Deal ID # 23831
Facsimile: (215) 328-0305
And a copy of any notices of default sent to:  
Citibank, N.A.  
388 Greenwich Street  
New York, New York  10013  
Attention:  General Counsel’s Office  
Deal ID No. 23831  
Facsimile:  (646) 291-5754

The Borrower or the Lender may change the address to which notices intended for it are to be directed by means of notice given to the other party in accordance with this Section 18. Each party agrees that it will not refuse or reject delivery of any notice given in accordance with this Section 18, that it will acknowledge, in writing, the receipt of any notice upon request by the other party and that any notice rejected or refused by it shall be deemed for purposes of this Section 18 to have been received by the rejecting party on the date so refused or rejected, as conclusively established by the records of the U.S. Postal Service or the courier service.

19.  
Payments on Non-Business Day. If the date for the making of any payment under this Note is not a Business Day, such payment shall be due and payable on the next succeeding Business Day.

20.  
Terms of Note Governing Payment Matters Control in the Event of any Conflict. In the event the provisions of the Loan Agreement or the other Citi Loan Documents (other than this Note) conflict with the provisions of this Note which govern the terms of repayment of the Citi Loan or the payment of other amounts due in connection with the Loan (including, without limitation, the provisions of this Note which govern the required payments of principal, interest and other amounts due in connection with the Citi Loan, the manner of payment, the calculation of interest, the payment of the Lender’s costs and expenses, the application of payments received by the Lender, the acceleration of amounts owed by the Borrower, late charges, default rates of interest, prepayments, prepayment premiums or maximum rates of interest or similar charges), the provisions of this Note shall govern and control.

21.  
Other Agreements. This Note is evidence of a single advance term loan which, if no Event of Default then exists, will be funded on the Conversion Date. The proceeds of this Note shall be used to fund the Project Owner Subordinate Loan, which will be secured by a second lien against the Project (such loan and second lien have been collaterally assigned to the Lender pursuant to the Subordinate Security Instrument). In connection with and as a condition for the advance under this Note on the Conversion Date, the Lender shall receive an endorsement, arranged for by the Project Owner in connection with that advance, to the second lien title policy insuring the second lien against the Project which shall have been provided to the Lender as a condition to its acceptance of this Note.

22.  
Determinations by Lender. Except to the extent expressly set forth in this Note to the contrary, in any instance where the consent or approval of Lender may be given or is required, or where any determination, judgment or decision is to be rendered by Lender under this Note, the granting, withholding or denial of such consent or approval and the rendering of
such determination, judgment or decision shall be made or exercised by Lender, as applicable (or its designated representative) at its sole and exclusive option and in its sole and absolute discretion.

23. **Release; Indemnity.**

(a) **Release.** Borrower covenants and agrees that, in performing any of its rights or duties under this Note, neither the Lender, nor its agents or employees, shall be liable for any losses, claims, damages, liabilities and expenses that may be incurred by any of them as a result of such performance, except to the extent such liability for any losses, claims, damages, liabilities or expenses arises out of the willful misconduct or gross negligence of such party.

(b) **Indemnity.** Borrower hereby agrees to indemnify and hold harmless the Lender and its agents and employees from and against any and all losses, claims, damages, liabilities and expenses including, without limitation, reasonable attorneys’ fees and costs and disbursements, which may be imposed or incurred by any of them in connection with this Note, except that no such party will be indemnified for any losses, claims, damages, liabilities or expenses arising out of the willful misconduct or gross negligence of such party. The foregoing shall be limited by Section 9.

24. **Governing Law.** This Note shall be governed by and enforced in accordance with the laws of the Property Jurisdiction, without giving effect to the choice of law principles of the Property Jurisdiction that would require the application of the laws of a jurisdiction other than the Property Jurisdiction.

25. **Consent to Jurisdiction and Venue.** Borrower and Lender agree that any controversy arising under or in relation to this Note shall be litigated exclusively in the Property Jurisdiction. The state and federal courts and authorities with jurisdiction in the Property Jurisdiction shall have exclusive jurisdiction over all controversies which shall arise under or in relation to this Note. Borrower and Lender irrevocably consent to service, jurisdiction, and venue of such courts for any such litigation and waives any other venue to which it might be entitled by virtue of domicile, habitual residence or otherwise.

26. **Severability.** The invalidity, illegality or unenforceability of any provision of this Note shall not affect the validity, legality or enforceability of any other provision, and all other provisions shall remain in full force and effect.

27. **Remedies Cumulative.** In the event of Borrower’s default under this Note, the Lender may exercise all or any one or more of its rights and remedies available under this Note, at law or in equity. Such rights and remedies shall be cumulative and concurrent, and may be enforced separately, successively or together, and the exercise of any particular right or remedy shall not in any way prevent the Lender from exercising any other right or remedy available to the Lender. The Lender may exercise any such remedies from time to time as often as may be deemed necessary by the Lender.
28. **No Agency or Partnership.** Nothing contained in this Note shall constitute Lender as a joint venturer, partner or agent of Borrower, or render Lender liable for any debts, obligations, acts, omissions, representations or contracts of Borrower.

29. **Entire Agreement; Amendment and Waiver.** This Note contains the complete and entire understanding of the parties with respect to the matters covered. This Note may not be amended, modified or changed, nor shall any waiver of any provision hereof be effective, except by a written instrument signed by the party against whom enforcement of the waiver, amendment, change, or modification is sought, and then only to the extent set forth in that instrument. No specific waiver of any of the terms of this Note shall be considered as a general waiver.

30. **Further Assurances.** Borrower shall at any time and from time to time, promptly execute and deliver all further instruments and documents, and take all further action that may be reasonably necessary or desirable, or that Lender may reasonably request, in order to protect any right or interest granted by this Note or to enable Lender to exercise and enforce its rights and remedies under this Note.

31. **Captions.** The captions of the sections of this Note are for convenience only and shall be disregarded in construing this Note.

32. **Servicer.** Borrower hereby acknowledges and agrees that, pursuant to the terms of the Subordinate Security Instrument: (a) from time to time, Lender may appoint a servicer to collect payments, escrows and deposits, to give and to receive notices under this Note or the other Citi Loan Documents, and to otherwise service the Citi Loan and (b) unless Borrower receives written notice from Lender to the contrary, any action or right which shall or may be taken or exercised by Borrower may be taken or exercised by such servicer with the same force and effect.

33. **Waiver of Trial by Jury.** TO THE MAXIMUM EXTENT PERMITTED UNDER APPLICABLE LAW, EACH OF BORROWER AND LENDER (A) COVENANTS AND AGREES NOT TO ELECT A TRIAL BY JURY WITH RESPECT TO ANY ISSUE ARISING OUT OF THIS NOTE OR THE RELATIONSHIP BETWEEN THE PARTIES THAT IS TRIABLE OF RIGHT BY A JURY AND (B) WAIVES ANY RIGHT TO TRIAL BY JURY WITH RESPECT TO SUCH ISSUE TO THE EXTENT THAT ANY SUCH RIGHT EXISTS NOW OR IN THE FUTURE. THIS WAIVER OF RIGHT TO TRIAL BY JURY IS SEPARATELY GIVEN BY EACH PARTY, KNOWINGLY AND VOLUNTARILY WITH THE BENEFIT OF COMPETENT LEGAL COUNSEL.

34. **Time of the Essence.** Time is of the essence with respect to this Note.

35. **Modifications.** All modifications (if any) to the terms of this Note (“Modifications”) are set forth on Schedule C attached to this Note. In the event of a Transfer under the terms of the Subordinate Security Instrument, some or all of the Modifications to this Note may be modified or rendered void by Lender at its option by notice to Borrower or such transferee.
36. **Attached Schedules.** The following Schedules are attached to this Note and are incorporated by reference herein as if more fully set forth in the text hereof:

**Schedule A – Interest Rate**

**Schedule B – Prepayment Premium**

**Schedule C – Modifications to Multifamily Permanent Note**

The terms of this Note are modified and supplemented as set forth in said Schedules. To the extent of any conflict or inconsistency between the terms of said Schedules and the text of this Note, the terms of said Schedules shall be controlling in all respects.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]
IN WITNESS WHEREOF, the undersigned has duly executed and delivered this Multifamily Permanent Note or caused this Multifamily Permanent Note to be duly executed and delivered by its authorized representative as of the date first set forth above. The undersigned intends that this instrument shall be deemed to be signed and delivered as a sealed instrument.

BORROWER:

NEW BRAUNFELS INDUSTRIAL DEVELOPMENT CORPORATION,
a nonprofit corporation

By: ________________________________
Name: ________________________________
Title: ________________________________
SCHEDULE A

PRINCIPAL AND INTEREST PAYMENTS

1. **Interest Rate.** Except as provided in Paragraphs 8 and 14 of this Note, interest ("Note Interest") shall accrue on the unpaid principal of this Note from, and including, the date of this Note until paid in full at an annual rate (the "Interest Rate") as follows:

   (a) Fixed Rate. Interest shall accrue at annual rate of three percent (3%).

   (b) Maximum Rate. Notwithstanding any other provision of this Note to the contrary, Note Interest shall not exceed the Maximum Rate, as the Maximum Rate may change in accordance with this Note.

   (c) Interest Accrual. Note Interest shall be computed on the basis of a 360-day year comprised of twelve 30-day months.

2. **Monthly Principal and Interest Payments.** Commencing on the First Payment Date and on each Loan Payment Date thereafter until and including the Maturity Date, consecutive monthly installments of principal and interest in the amount of $___________ (based upon a thirty-five year amortization schedule assuming a 360-day year comprised of twelve 30-day months), shall be payable on each Loan Payment Date until the entire unpaid principal balance evidenced by this Note is fully paid. Any remaining principal and interest, if not sooner paid, shall be due and payable on the Maturity Date.
YIELD MAINTENANCE OPTION:

Any prepayment premium payable under Paragraph 10 of this Note shall be computed as follows:

(a) If the prepayment is made at any time after the date of this Note and before ______________, 203__ (the “Yield Maintenance Period End Date”) the prepayment premium shall be the greater of:

(i) 1% of the amount of principal being prepaid; or

(ii) The product obtained by multiplying:

(A) the amount of principal being prepaid,

by

(B) the difference obtained by subtracting from the Interest Rate on this Note the Yield Rate (as defined below), on the twenty-fifth Business Day preceding (x) the date upon which any voluntary prepayment will be made, determined in accordance with Section 10 of this Note, or (y) the date Lender accelerates the Citi Loan or otherwise accepts a prepayment pursuant to Paragraph 10(c) or Paragraph 10(d) of this Note,

by

(C) the present value factor calculated using the following formula:

\[
\frac{1 - (1 + r)^{n/12}}{r}
\]

\[r = \text{Yield Rate}\]

\[n = \text{the number of months remaining between (1) either of the following: (x) in the case of a voluntary prepayment, the last calendar day of the month during which the prepayment is made, or (y) in any other case, the date on which Lender accelerates the unpaid principal balance of this Note and (2) the Yield Maintenance Period End Date}]

For purposes of this clause (ii), the “Yield Rate” means the yield calculated by interpolating the yields for the immediately shorter
and longer term U.S. “Treasury constant maturities” (as reported in the Federal Reserve Statistical Release H.15 Selected Interest Rates (the "Fed Release") under the heading "U.S. government securities") closest to the remaining term of the Prepayment Premium Period, as follows (rounded to three decimal places):

\[
\{ \left( \frac{a - b}{x - y} \right) \times (z - y) \} + b
\]

\(a\) = the yield for the longer U.S. Treasury constant maturity
\(b\) = the yield for the shorter U.S. Treasury constant maturity
\(x\) = the term of the longer U.S. Treasury constant maturity
\(y\) = the term of the shorter U.S. Treasury constant maturity
\(z\) = “n” (as defined in the present value factor calculation above) divided by 12.

Notwithstanding any provision to the contrary, if “\(z\)” equals a term reported under the U.S. “Treasury constant maturities” subheading in the Fed Release, the yield for such term shall be used, and interpolation shall not be necessary. If publication of the Fed Release is discontinued by the Federal Reserve Board, Lender shall determine the Yield Rate from another source selected by Lender. Any determination of the Yield Rate by Lender will be binding absent manifest error.

(b) Notwithstanding the provisions of Paragraph 10 of this Note, no prepayment premium shall be payable with respect to any prepayment made on or after the Yield Maintenance Period End Date.
SCHEDULE C

MODIFICATIONS TO MULTIFAMILY PERMANENT NOTE

The following modifications are made to the text of the Note that precedes this Schedule:

[None]
$833,000.00 March __, 2016

FOR VALUE RECEIVED, the undersigned ("Borrower") promises to pay to the order of NEW BRAUNFELS INDUSTRIAL DEVELOPMENT CORPORATION, a nonprofit corporation created under the Texas Development Corporation Act, the maximum principal sum of EIGHT HUNDRED THIRTY-THREE THOUSAND AND NO/100 DOLLARS ($833,000.00), with interest on the unpaid principal balance from time to time outstanding at the annual rate as set forth on Schedule A. The terms of this Note incorporate the Modifications, if any, set forth on Schedule C to this Note.

1. Defined Terms. As used in this Note, the following terms shall have the following definitions:

(a) “Beneficiary Parties” shall have the meaning set forth in the Subordinate Security Instrument.

(b) “Business Day” means any day other than (i) a Saturday or a Sunday, or (ii) a day on which federally insured depository institutions in New York, New York are authorized or obligated by law, regulation, governmental decree or executive order to be closed.

(c) “Conversion Date” has the meaning assigned to that term in the Senior Loan Agreement.

(d) “Default Rate” shall have the meaning set forth in Section 8 of this Note.

(e) “First Payment Date” means the first day of the calendar month immediately following the calendar month in which the Conversion Date occurs.

(f) “Indebtedness” means the principal of, interest on, and any other amounts due at any time under, this Note and the Subordinate Security Instrument, including prepayment premiums, late charges, default interest, and advances to protect the security of the Subordinate Security Instrument as described in Section 12 of the Subordinate Security Instrument.

(g) “Interest Rate” shall have the meaning set forth in Paragraph 1 of Schedule A to this Note.
(h) “Lender” means New Braunfels Industrial Development Corporation and any subsequent holder of this Note (including, without limitation, CitiBank, N.A., as the collateral assignee of this Note).

(i) “Loan” means the loan evidenced by this Note.

(j) “Loan Agreement” means that certain Loan Agreement dated March __, 2016, among Borrower, Lender and Citibank, N.A.

(k) “Loan Month” means the period commencing on a Loan Payment Date and ending on the day preceding the next succeeding Loan Payment Date (without adjustment in either case for Business Day conventions).

(l) “Loan Payment Date” means the first Business Day of each month, commencing on the First Payment Date.

(m) “Lock-Out Period” means the period commencing on the date of this Note and ending six (6) calendar months preceding the fifteenth (15th) anniversary of the Conversion Date.

(n) “Maturity Date” means the earlier to occur of (i) the date which is fifteen (15) years following the Conversion Date, or (ii) any earlier date on which the unpaid principal balance of this Note becomes due and payable, by acceleration or otherwise.

(o) “Maximum Rate” means the maximum interest rate that may be paid on the Loan under State law.

(p) “Note” means this Multifamily Permanent Subordinate Note.

(q) “Note Interest” shall have the meaning set forth in Paragraph 1 of Schedule A to this Note.

(r) “Prepayment Premium Period” means the period commencing on the date of this Note and ending six (6) calendar months preceding the fifteenth (15th) anniversary of the Conversion Date.

(s) “Property Jurisdiction” shall have the meaning set forth in the Subordinate Security Instrument.

(t) “Written Notice” shall mean a written consent or notice signed by an authorized representative of Borrower or an authorized representative of the Lender, as appropriate.

All other capitalized terms used but not defined in this Note shall have the meanings given to such terms in the Loan Agreement.

2. **Method of Payment.** All payments due under this Note shall be payable to Servicer, or, if there is no Servicer, to the Lender, or its successor. Each such payment shall be
made by wire transfer of immediately available funds in accordance with wire transfer instructions that the Lender or Servicer shall supply by Written Notice to the Borrower from time to time.

3. **Payment of Principal and Interest.** Principal and interest shall be paid as follows:

   (a) Borrower shall pay all amounts due under this Note at the times and in the amounts set forth herein. Borrower shall make its payments under this Note in immediately available funds.

   (b) Borrower shall pay monthly payments of principal and interest as set forth on Schedule A attached hereto in successive monthly installments commencing on the First Payment Date and continuing on each Loan Payment Date thereafter until and including the Maturity Date. Such payments shall be made to the Lender or the Servicer by 2:00 p.m., New York City time, on each Loan Payment Date.

   (c) Any accrued interest remaining past due may, at Lender’s discretion, be added to and become part of the unpaid principal balance and shall bear interest at the rate or rates specified in this Note, and any reference below to “accrued interest” shall refer to accrued interest that has not become part of the unpaid principal balance.

   (d) Borrower shall pay all unpaid principal of and interest on this Note on the Maturity Date and any other amounts due under subsection 3(a) hereof.

   (e) Any regularly scheduled monthly installment of principal and interest that is received by Lender before the date it is due shall be deemed to have been received on the due date solely for the purpose of calculating interest due.

   (f) Borrower shall make all payments of principal and interest under this Note without relief from valuation and appraisement laws.

   (g) Borrower acknowledges that the calculation of all interest payments shall be made by the Lender and shall be final and conclusive, absent manifest error.

4. **Application of Payments.** If at any time Lender receives, from Borrower or otherwise, any amount applicable to the Indebtedness which is less than all amounts due and payable at such time, Lender may apply that payment to amounts then due and payable under this Note in any manner and in any order determined by Lender, in Lender’s discretion. Borrower agrees that neither Lender’s acceptance of a payment from Borrower in an amount that is less than all amounts then due and payable nor Lender’s application of such payment shall constitute or be deemed to constitute either a waiver of the unpaid amounts or an accord and satisfaction.

5. **Security.** The Indebtedness is secured by, among other things, the Security Instrument and reference is made to the Subordinate Security Instrument for other rights of Lender as to collateral for the Indebtedness.
6. **Acceleration.** If an Event of Default has occurred and is continuing, the entire unpaid principal balance, any accrued interest, the prepayment premium payable under Section 10, if any, and all other amounts payable under this Note and the Subordinate Security Instrument shall at once become due and payable, at the option of Lender, without any prior notice to Borrower (except if notice is required by applicable law, then after such notice). Lender may exercise this option to accelerate regardless of any prior forbearance.

7. **Late Charge.** If any amount payable under this Note or under the Subordinate Security Instrument is not received by Lender when such amount is due (unless applicable law requires a longer period of time before a late charge may be imposed, in which event, such longer period shall be substituted), Borrower shall pay to Lender, immediately and without demand by Lender, a late charge equal to five percent (5.0%) of such amount (unless applicable law requires a lesser amount be charged, in which event such lesser amount shall be substituted). Notwithstanding the foregoing, with regard to each regularly scheduled monthly installment of principal and interest payable pursuant to this Note, such late charge shall not become due and payable to Lender so long as the Borrower makes such payment on or prior to the tenth (10th) calendar day following the date upon which such payment is due (or the Business Day immediately following such tenth (10th) calendar day if such tenth (10th) calendar day is not a Business Day). Any accrued but unpaid late charges shall be added to and become part of the unpaid principal balance of this Note, shall bear interest at the rate or rates specified in this Note, and shall be secured by the Subordinate Security Instrument. Borrower acknowledges that its failure to make timely payments will cause Lender to incur additional expenses in servicing and processing the Loan, and that it is extremely difficult and impractical to determine those additional expenses. Borrower agrees that the late charge payable pursuant to this Section represents a fair and reasonable estimate, taking into account all circumstances existing on the date of this Note, of the additional expenses Lender will incur by reason of such late payment, and such late charge shall be deemed liquidated damages and not additional interest or a penalty. The late charge is payable in addition to, and not in lieu of, any interest payable at the Default Rate pursuant to Section 8. Notwithstanding anything to the contrary in the Subordinate Security Instrument, if a Servicer has been appointed by Lender, any late charges payable hereunder shall not be remitted to Lender and shall instead be paid directly to Servicer, who shall apply such late charges in accordance with the terms of the applicable servicing agreement. Any action regarding the collection of a Late Charge will be without prejudice to any other rights, and shall not act as a waiver of any other rights, that the Servicer or the Lender may have as provided herein, in the Subordinate Security Instrument, or at law or in equity.

8. **Default Rate.** So long as (a) any monthly installment under this Note remains past due, or (b) any other Event of Default has occurred and is continuing, interest under this Note shall accrue on the unpaid principal balance from the earlier of the due date of the first unpaid monthly installment or the occurrence of such other Event of Default, as applicable, at a rate per annum (the “Default Rate”) equal to the lesser of the Maximum Rate or a rate equal to the Interest Rate plus four percent (4%), in each case compounded monthly (computed in accordance with Schedule A in the same manner in which Note Interest is computed). If the unpaid principal balance and all accrued interest are not paid in full on the Maturity Date, the unpaid principal balance and all accrued interest shall bear interest from the Maturity Date at the Default Rate. Borrower also acknowledges that its failure to make timely payments will cause Lender to incur additional expenses in servicing and processing the Loan, that, during the time
that any monthly installment under this Note is delinquent, Lender will incur additional costs and expenses arising from its loss of the use of the money due and from the adverse impact on Lender’s ability to meet its other obligations and to take advantage of other investment opportunities, and that it is extremely difficult and impractical to determine those additional costs and expenses. Borrower also acknowledges that, during the time that any monthly installment under this Note is delinquent or any other Event of Default has occurred and is continuing, Lender’s risk of nonpayment of this Note will be materially increased and Lender is entitled to be compensated for such increased risk. Borrower agrees that the increase in the rate of interest payable under this Note to the Default Rate as provided above represents a fair and reasonable estimate, taking into account all circumstances existing on the date of this Note, of the additional costs and expenses Lender will incur by reason of Borrower’s delinquent payment and the additional compensation Lender is entitled to receive for the increased risks of nonpayment associated with a delinquent loan.

9. **Personal Liability of Borrower.**

   (a) Except as otherwise provided in this Section 9, neither Borrower nor any of its partners, members and/or managers shall have any personal liability under this Note or the Subordinate Security Instrument for the repayment of the Indebtedness or for the performance of any other obligations of Borrower under the Subordinate Security Instrument, and Lender’s only recourse for the satisfaction of the Indebtedness and the performance of such obligations shall be Lender’s exercise of its rights and remedies with respect to the Mortgaged Property and any other collateral held by Lender as security for the Indebtedness (in no event shall a member of Borrower be obligated under this Note by virtue of it being a member). This limitation on Borrower’s liability shall not limit or impair Lender’s enforcement of its rights against any guarantor of the Indebtedness or any guarantor of any obligations of Borrower.

   (b) Borrower shall be personally liable to Lender for the repayment of a portion of the Indebtedness equal to any loss or damage suffered by Lender (the “Losses”) as a result of (1) failure of Borrower to pay to Lender upon demand after an Event of Default all Rents to which Lender is entitled under Section 3(a) of the Subordinate Security Instrument and the amount of all security deposits collected by Borrower from tenants then in residence; (2) failure of Borrower to apply all insurance proceeds and condemnation proceeds as required by the Subordinate Security Instrument; (3) failure of Borrower to comply with Section 14(d) or (e) of the Subordinate Security Instrument relating to the delivery of books and records, statements, schedules, and reports; (4) fraud or material misrepresentation by Borrower or any general partner, managing member, manager, officer, director, partner, member, agent or employee of Borrower in connection with the application for or creation of the Indebtedness or any request for any action or consent by or on behalf of Lender; (5) failure to apply Rents, first, to the payment of reasonable operating expenses (other than property management fees that are not currently payable pursuant to the terms of an Assignment of Management Agreement or the Subordinate Security Instrument) and then to amounts (“Debt Service Amounts”) payable under this Note or the Subordinate Security Instrument (except that Borrower will not be personally liable (i) to the extent that Borrower lacks the legal right to direct the disbursement of such sums because of a
bankruptcy, receivership or similar judicial proceeding, or (ii) with respect to Rents that are distributed on account of any calendar year if Borrower has paid all operating expenses and Debt Service Amounts for that calendar year; (6) failure of Borrower to comply with the provisions of Section 17(a) of the Subordinate Security Instrument prohibiting the commission of waste or allowing the impairment or deterioration of the Mortgaged Property; or (7) failure of Borrower to obtain and maintain any local real estate tax abatement or exemption required under the Subordinate Security Instrument, or the reduction, revocation, cancellation or other termination of such abatement or exemption, as a result of any act or omission by or on behalf of Borrower, Borrower or any of their respective partners, members, managers, directors, officers, agents, employees or representatives.

(c) For purposes of determining Borrower’s personal liability under this Section 9, all payments made by Borrower or any guarantor of this Note with respect to the Indebtedness and all amounts received by Lender from the enforcement of its rights under the Subordinate Security Instrument shall be applied first to the portion of the Indebtedness for which Borrower has no personal liability.

(d) Borrower shall become personally liable to Lender for the repayment of all of the Indebtedness upon the occurrence of any of the following Events of Default: (1) Borrower’s acquisition of any property or operation of any business not permitted by Section 32 of the Subordinate Security Instrument; or (2) a Transfer (including, but not limited to, a lien or encumbrance) that is an Event of Default under Section 21 of the Subordinate Security Instrument, other than a Permitted Transfer (as that term is defined in the Subordinate Security Instrument); or (3) a Bankruptcy Event, as defined by the Subordinate Security Instrument (but only if the Bankruptcy Event occurs with the consent or active participation of Borrower, its General Partner or any Borrower Affiliate (as defined by the Subordinate Security Instrument).

(e) In addition to any personal liability for the Indebtedness, Borrower shall be personally liable to Lender for (1) the performance of all of Borrower’s obligations under Section 18 of the Subordinate Security Instrument (relating to environmental matters) and the Agreement of Environmental Indemnification dated of even date with the Loan Agreement; (2) the costs of any audit under Section 14(d) of the Subordinate Security Instrument; and (3) any costs and expenses incurred by Lender in connection with the collection of any amount for which Borrower is personally liable under this Section 9, including out of pocket expenses and reasonable fees of attorneys and expert witnesses and the costs of conducting any independent audit of Borrower’s or Borrower’s books and records to determine the amount for which Borrower has personal liability.

(f) To the extent that Borrower has personal liability under this Section 9, Lender may exercise its rights against Borrower personally without regard to whether Lender has exercised any rights against the Mortgaged Property or any other security, or pursued any rights against any guarantor, or pursued any other rights available to Lender under this Note or the Subordinate Security Instrument or applicable law. For purposes of this Section 9, the term “Mortgaged Property” shall not include any funds that (1) have been applied by Borrower as required or permitted by the Subordinate Security
Instrument prior to the occurrence of an Event of Default or (2) Borrower was unable to apply as required or permitted by the Subordinate Security Instrument because of a bankruptcy, receivership, or similar judicial proceeding. To the fullest extent permitted by applicable law, in any action to enforce Borrower’s personal liability under this Section 9, Borrower waives any right to set off the value of the Mortgaged Property against such personal liability.

(g) Nothing herein or in the Subordinate Security Instrument shall be deemed to be a waiver of any right which the Lender or the Servicer may have under Sections 506(a), 506(b), 1111(b) or any other provision of the United States Bankruptcy Code, as such sections may be amended, or corresponding or superseding sections of the Bankruptcy Amendments and Federal Judgeship Act of 1984, to file a claim for the full amount due to the Lender and the Servicer hereunder and under the Subordinate Security Instrument or to require that all collateral shall continue to secure the amounts due hereunder and under the Subordinate Security Instrument.

10. **Voluntary and Involuntary Prepayments.**

(a) In connection with any prepayment (i.e., any receipt by Lender of principal, other than principal required to be paid in monthly installments pursuant to Section 3, prior to the Maturity Date) made under this Note, whether voluntary or involuntary, a prepayment premium shall be payable to the extent provided below.

(b) NO VOLUNTARY PREPAYMENTS OF THIS NOTE, IN WHOLE OR IN PART, SHALL BE PERMITTED DURING THE LOCK-OUT PERIOD. After the Lock-Out Period, Borrower may voluntarily prepay all (but not less than all) of the unpaid principal balance of this Note on any Loan Payment Date if: (i) Borrower has given Lender prior Written Notice of its intention to make such prepayment at least twenty (20) days prior to the proposed prepayment date (or such shorter time as agreed to by Lender in its sole discretion) and (ii) Borrower pays (A) the amount of principal being prepaid, (B) all accrued interest, (C) prior to the end of the Prepayment Premium Period, the prepayment premium calculated pursuant to Schedule B, and (D) all other sums due Lender at the time of such prepayment. If Lender, in Lender’s sole and absolute discretion, agrees in writing to waive the foregoing provision and allow a prepayment during the Lock-Out Period, a prepayment premium calculated pursuant to Schedule B shall be due and payable by Borrower. In connection with any prepayment pursuant to this Section 10(b), the Borrower shall wire transfer the amount required hereunder in immediately available funds by 2:00 p.m., New York City time, on the date of prepayment. For all purposes including the accrual of interest, any prepayment received by Lender on any day other than the last calendar day of a Loan Month shall be deemed to have been received on the last calendar day of such Loan Month.

(c) Upon Lender’s exercise of any right of acceleration under this Note, Borrower shall pay to Lender, in addition to the entire unpaid principal balance of this Note outstanding at the time of the acceleration, (i) all accrued interest and all other sums due Lender, and (ii) if such acceleration occurs during the Prepayment Premium Period, the prepayment premium calculated pursuant to Schedule B.
(d) Any application by Lender of any collateral or other security to the repayment of any portion of the unpaid principal balance of this Note prior to the end of the Prepayment Premium Period and in the absence of acceleration shall be deemed to be a partial prepayment by Borrower, requiring the payment to Lender by Borrower of a prepayment premium, calculated pursuant to Schedule B.

(e) The Borrower shall prepay the outstanding principal balance of this Note at the direction of the Lender, in whole or in part, at a price equal to the outstanding principal balance of this Note, plus accrued interest plus any other amounts payable under this Note or the Subordinate Security Instrument, upon the occurrence of any event or condition described below:

1. in whole or in part, if the Mortgaged Property shall have been damaged or destroyed to the extent that it is not practicable or feasible to rebuild, repair or restore the damaged or destroyed property within the period and under the conditions described in the Subordinate Security Instrument following such event of damage or destruction; or

2. in whole or in part, if title to, or the use of, all or a portion of the Mortgaged Property shall have been taken under the exercise of the power of eminent domain by any Governmental Authority which results in a prepayment of this Note under the conditions described in the Subordinate Security Instrument; or

3. in whole or in part, to the extent that insurance proceeds or proceeds of any condemnation award with respect to the Mortgaged Property are not applied to restoration of the Mortgaged Property in accordance with the provisions of the Subordinate Security Instrument.

In connection with any such prepayment, the Borrower shall wire transfer immediately available funds by no later than 2:00 p.m., New York City time, on the date fixed by the Lender, which date shall be communicated by the Lender in writing to the Borrower. To the extent that the Borrower receives any insurance proceeds or condemnation awards that are to be applied to the prepayment of this Note, such amounts shall be applied to the prepayment of this Note. No prepayment premium shall be payable with respect to any prepayment required by this Section 10(e).

(f) Any permitted or required prepayment of less than the unpaid principal balance of this Note shall not extend or postpone the due date of any subsequent monthly installments or change the amount of such installments, unless Lender agrees otherwise in writing.

(g) Borrower recognizes that any prepayment of the unpaid principal balance of this Note, whether voluntary, involuntary or resulting from a default by Borrower, will result in Lender’s incurring loss, including reinvestment loss, additional expense and frustration or impairment of Lender’s ability to meet its commitments to third parties. Borrower agrees to pay to Lender upon demand damages for the detriment caused by any
prepayment, and agrees that it is extremely difficult and impractical to ascertain the extent of such damages. Borrower therefore acknowledges and agrees that the formula for calculating prepayment premiums set forth on Schedule B represents a reasonable estimate of the damages Lender will incur because of a prepayment.

(h) Borrower further acknowledges that the lock-out and prepayment premium provisions of this Note are a material part of the consideration for the Loan, and acknowledges that the terms of this Note are in other respects more favorable to Borrower as a result of Borrower’s voluntary agreement to the Lock-Out Period and the prepayment premium provisions.

(i) Any prepayment premium payable hereunder shall be remitted to Servicer, or if a Servicer has not been appointed by Lender, to Lender.

11. **Costs and Expenses.** To the fullest extent allowed by applicable law, Borrower shall pay all expenses and costs, including, without limitation, out-of-pocket expenses and reasonable fees of attorneys (including, without limitation, in-house attorneys) and expert witnesses and costs of investigation, incurred by Lender as a result of any default under this Note or in connection with efforts to collect any amount due under this Note, or to enforce the provisions of the Subordinate Security Instrument, including those incurred in post-judgment collection efforts and in any bankruptcy proceeding (including any action for relief from the automatic stay of any bankruptcy proceeding) or judicial or non-judicial foreclosure proceeding. For purposes of Section 9(e) and this Section 11, attorneys’ out of pocket expenses shall include, but are not limited to, support staff costs, costs of preparing for litigation, computerized research, telephone and facsimile transmission expenses, mileage, deposition costs, postage, duplicating, process service, videotaping and similar costs and expenses.

12. **Origination Fee.** Borrower agrees to pay Lender an origination fee in an amount equal to three percent (3%) of Eight Hundred Thirty-Three Thousand and NO/100 Dollars ($833,000.00) upon execution of this Note.

13. **Forbearance.** Any forbearance by Lender in exercising any right or remedy under this Note or the Subordinate Security Instrument or otherwise afforded by applicable law, shall not be a waiver of or preclude the exercise of that or any other right or remedy. The acceptance by Lender of any payment after the due date of such payment, or in an amount which is less than the required payment, shall not be a waiver of Lender’s right to require prompt payment when due of all other payments or to exercise any right or remedy with respect to any failure to make prompt payment. Enforcement by Lender of any security for Borrower’s obligations under this Note shall not constitute an election by Lender of remedies so as to preclude the exercise of any other right or remedy available to Lender.

14. **Waivers.** Except as expressly required by the Subordinate Security Instrument, presentment, demand, notice of dishonor, protest, notice of acceleration, notice of intent to demand or accelerate payment or maturity, presentment for payment, notice of nonpayment, grace, and diligence in collecting the Indebtedness are waived by Borrower and all endorsers and guarantors of this Note and all other third party obligors.
15. **Loan Charges.** Neither this Note nor the Subordinate Security Instrument shall be construed to create a contract for the use, forbearance or detention of money requiring payment of interest at a rate greater than the maximum interest permitted to be charged under applicable law. If any applicable law limiting the amount of interest or other charges permitted to be collected from Borrower in connection with the Loan is interpreted so that any interest or other charge provided for in the Subordinate Security Instrument, whether considered separately or together with other charges provided for in the Subordinate Security Instrument, violates that law, and Borrower is entitled to the benefit of that law, that interest or charge is hereby reduced to the extent necessary to eliminate that violation. The amounts, if any, previously paid to Lender in excess of the permitted amounts shall be applied by Lender to reduce the unpaid principal balance of this Note. For the purpose of determining whether any applicable law limiting the amount of interest or other charges permitted to be collected from Borrower has been violated, all Indebtedness that constitutes interest, as well as all other charges made in connection with the Indebtedness that constitute interest, shall be deemed to be allocated and spread ratably over the stated term of this Note. Unless otherwise required by applicable law, such allocation and spreading shall be effected in such a manner that the rate of interest so computed is uniform throughout the stated term of this Note.

16. **Obligations of the Borrower Absolute and Unconditional.** Subject to Section 9, the obligations of the Borrower to make all payments required under this Note and the Subordinate Security Instrument on or before the date the same become due, and to perform all of its other obligations, covenants and agreements hereunder and under the Subordinate Security Instrument shall be primary, absolute, unconditional and irrevocable, and shall be paid or performed strictly in accordance with the terms of this Note and the Subordinate Security Instrument under any and all circumstances, without notice or demand (except as expressly required by the Subordinate Security Instrument), and without abatement, deduction, set-off, counterclaim, recoupment or defense or any right of termination or cancellation arising from any circumstance whatsoever, whether now existing or hereafter arising, and irrespective of whether the Borrower's title to the Mortgaged Property or to any part thereof is defective or nonexistent, and notwithstanding any damage due to loss, theft or destruction of the Mortgaged Property or any part thereof, any failure of consideration or frustration of commercial purpose, the taking by eminent domain of title to or of the right of temporary use of all or any part of the Mortgaged Property, legal curtailment of the Borrower's use thereof, the eviction or constructive eviction of the Borrower, any change in the tax or other laws of the United States of America, the State or any political subdivision thereof, any change in the Lender's legal organization or status, or any default of the Lender hereunder or under the Subordinate Security Instrument, and regardless of the invalidity of any action of the Lender or the invalidity of any portion of this Note or the Subordinate Security Instrument. Provided further, the obligations of Borrower under this Note and the Subordinate Security Instrument shall not be affected by:

(a) any lack of validity or enforceability of the Subordinate Security Instrument or any of the Related Documents;

(b) any amendment of, or any waiver or consent with respect to, the Subordinate Security Instrument or Related Documents;
(c) the existence of any claim, set-off, defense or other rights which Borrower may have at any time against Lender (other than the defense of payment in accordance with the terms of this Note or the Subordinate Security Instrument) or any other Person, whether in connection with this Note or the Subordinate Security Instrument, the Related Documents or any transaction contemplated thereby or any unrelated transaction;

(d) any breach of contract or other dispute between Borrower and Lender; or

(e) any exchange, release or nonperfection of any lien or security interest in any collateral pledged or otherwise provided to secure any of the obligations contemplated herein, in the Subordinate Security Instrument or in any Related Document.

To the extent permitted by law, the Borrower hereby waives the application to it of the provisions of any statute or other law now or hereafter in effect contrary to any of its obligations, covenants or agreements under this Note or the Subordinate Security Instrument or which releases or purports to release the Borrower therefrom. Nothing contained herein shall be construed as prohibiting the Borrower from pursuing any rights or remedies it may have against any Person in a separate legal proceeding.

17. **Commercial Purpose.** Borrower represents that the Indebtedness is being incurred by Borrower solely for the purpose of carrying on a business or commercial enterprise, and not for personal, family, household or agricultural purposes.

18. **Counting of Days.** Except where otherwise specifically provided, any reference in this Note to a period of “days” means calendar days, not Business Days.

19. **Notices.** All notices, demands and other communications required or permitted to be given by Lender to Borrower pursuant to this Note shall be in writing, addressed as set forth below, and shall include a reference to “Citi Loan # 23831.” Each notice shall be deemed given on the earliest to occur of (a) the date when the notice is received by the addressee; (b) the first Business Day after the notice is delivered to a recognized overnight courier service, with arrangements made for payment of charges for next Business Day delivery; or (c) the third Business Day after the notice is deposited in the United States mail with postage prepaid, certified mail, return receipt requested.

**To Borrower:**
Reserve at Engel Road, LLC
9349 WaterStone Blvd., Suite 200
Cincinnati, Ohio 45249
Attn: Michael Riechman and Elizabeth A. Mangan, Esq.

**With a copy to:**
Dinsmore & Shohl LLP
One S. Main Street, #1300
Dayton, Ohio 45402
Attention: Fred Caspar
and a copy to: Locke Lord LLP
600 Congress Avenue, #2200
Austin, Texas 78701
Attention: Rick Morrow

And a copy to: RBC Tax Credit Equity, LLC
600 Superior Avenue, Suite 2300
Cleveland, Ohio 44114
Attention: President and General Counsel

And a copy to: Kutak Rock
1650 Farnam Street
Omaha, Nebraska 68102
Attention: Robert Coon

If to Lender: New Braunfels Industrial Development Corporation
424 South Castell Avenue
New Braunfels, Texas 78130

With a copy to: Attention: James P. Plummer
Norton Rose Fulbright US LLP
300 Covent Street, Suite 2100
San Antonio, Texas 78205-3792

And to: Citibank, N.A.
390 Greenwich Street, 2nd Floor
New York, New York 10013
Attention: Account Specialist
Deal ID #: 23831
Facsimile: (212) 723-8209

Citibank, N.A.
325 East Hillcrest Drive, Suite 160
Thousand Oaks, California 91360
Attention: Operations Manager/Asset Manager
Deal ID #: 23831
Facsimile: (805) 557-0924

Prior to the Conversion Date: Citibank, N.A.
390 Greenwich Street, 2nd Floor
New York, New York 10013
Attention: Account Specialist
Deal ID #: 23831
Facsimile: (212) 723-8209

Following the Citibank, N.A.
The Borrower or the Lender may change the address to which notices intended for it are to be directed by means of notice given to the other party in accordance with this Section 18. Each party agrees that it will not refuse or reject delivery of any notice given in accordance with this Section 18, that it will acknowledge, in writing, the receipt of any notice upon request by the other party and that any notice rejected or refused by it shall be deemed for purposes of this Section 18 to have been received by the rejecting party on the date so refused or rejected, as conclusively established by the records of the U.S. Postal Service or the courier service.

20. **Payments on Non-Business Day.** If the date for the making of any payment under this Note is not a Business Day, such payment shall be due and payable on the next succeeding Business Day.

21. **Terms of Note Governing Payment Matters Control in the Event of any Conflict.** In the event the provisions of the Loan Agreement or the Subordinate Security Instrument (other than this Note) conflict with the provisions of this Note which govern the terms of repayment of the Loan or the payment of other amounts due in connection with the Loan (including, without limitation, the provisions of this Note which govern the required payments of principal, interest and other amounts due in connection with the Loan, the manner of payment, the calculation of interest, the payment of the Lender’s costs and expenses, the application of payments received by the Lender, the acceleration of amounts owed by the Borrower, late charges, default rates of interest, prepayments, prepayment premiums or maximum rates of interest or similar charges), the provisions of this Note shall govern and control.

22. **Other Agreements.** This Note is evidence of a single advance term loan which will be funded exclusively with the proceeds of the Citi Loan (simultaneously with the funding thereof). In connection therewith, this Note will be collaterally assigned to Citibank, N.A. as security for the Citi Note and as the collateral assignee, Borrower acknowledges Citibank, N.A. shall be entitled to the payment made on this Note and to enforce all rights and remedies of the holder of this Note (including enforcing the Subordinate Security Instrument).
23. **Determinations by Lender.** Except to the extent expressly set forth in this Note to the contrary, in any instance where the consent or approval of Lender may be given or is required, or where any determination, judgment or decision is to be rendered by Lender under this Note, the granting, withholding or denial of such consent or approval and the rendering of such determination, judgment or decision shall be made or exercised by Lender, as applicable (or its designated representative) at its sole and exclusive option and in its sole and absolute discretion.

24. **Release; Indemnity.**

   (a) **Release.** Borrower covenants and agrees that, in performing any of its rights or duties under this Note, neither the Lender, nor its agents or employees, shall be liable for any losses, claims, damages, liabilities and expenses that may be incurred by any of them as a result of such performance, except to the extent such liability for any losses, claims, damages, liabilities or expenses arises out of the willful misconduct or gross negligence of such party.

   (b) **Indemnity.** Borrower hereby agrees to indemnify and hold harmless the Lender and its agents and employees from and against any and all losses, claims, damages, liabilities and expenses including, without limitation, reasonable attorneys’ fees and costs and disbursements, which may be imposed or incurred by any of them in connection with this Note, except that no such party will be indemnified for any losses, claims, damages, liabilities or expenses arising out of the willful misconduct or gross negligence of such party.

25. **Governing Law.** This Note shall be governed by and enforced in accordance with the laws of the Property Jurisdiction, without giving effect to the choice of law principles of the Property Jurisdiction that would require the application of the laws of a jurisdiction other than the Property Jurisdiction.

26. **Consent to Jurisdiction and Venue.** Borrower agrees that any controversy arising under or in relation to this Note shall be litigated exclusively in the Property Jurisdiction. The state and federal courts and authorities with jurisdiction in the Property Jurisdiction shall have exclusive jurisdiction over all controversies which shall arise under or in relation to this Note. Borrower irrevocably consents to service, jurisdiction, and venue of such courts for any such litigation and waives any other venue to which it might be entitled by virtue of domicile, habitual residence or otherwise. However, nothing herein is intended to limit Lender’s right to bring any suit, action or proceeding relating to matters arising under this Note against Borrower or any of Borrower’s assets in any court of any other jurisdiction.

27. **Severability.** The invalidity, illegality or unenforceability of any provision of this Note shall not affect the validity, legality or enforceability of any other provision, and all other provisions shall remain in full force and effect.

28. **Remedies Cumulative.** In the event of Borrower’s default under this Note, the Lender may exercise all or any one or more of its rights and remedies available under this Note, at law or in equity. Such rights and remedies shall be cumulative and concurrent, and may be
enforced separately, successively or together, and the exercise of any particular right or remedy shall not in any way prevent the Lender from exercising any other right or remedy available to the Lender. The Lender may exercise any such remedies from time to time as often as may be deemed necessary by the Lender.

29. **No Agency or Partnership.** Nothing contained in this Note shall constitute Lender as a joint venturer, partner or agent of Borrower, or render Lender liable for any debts, obligations, acts, omissions, representations or contracts of Borrower.

30. **Entire Agreement; Amendment and Waiver.** This Note contains the complete and entire understanding of the parties with respect to the matters covered. This Note may not be amended, modified or changed, nor shall any waiver of any provision hereof be effective, except by a written instrument signed by the party against whom enforcement of the waiver, amendment, change, or modification is sought, and then only to the extent set forth in that instrument. No specific waiver of any of the terms of this Note shall be considered as a general waiver.

31. **Further Assurances.** Borrower shall at any time and from time to time, promptly execute and deliver all further instruments and documents, and take all further action that may be reasonably necessary or desirable, or that Lender may reasonably request, in order to protect any right or interest granted by this Note or to enable Lender to exercise and enforce its rights and remedies under this Note.

32. **Captions.** The captions of the sections of this Note are for convenience only and shall be disregarded in construing this Note.

33. **Servicer.** Borrower hereby acknowledges and agrees that, pursuant to the terms of the Subordinate Security Instrument: (a) from time to time, Lender may appoint a servicer to collect payments, escrows and deposits, to give and to receive notices under this Note or the Subordinate Security Instrument, and to otherwise service the Loan and (b) unless Borrower receives Written Notice from Lender to the contrary, any action or right which shall or may be taken or exercised by Lender may be taken or exercised by such servicer with the same force and effect.

34. **Waiver of Trial by Jury.** TO THE MAXIMUM EXTENT PERMITTED UNDER APPLICABLE LAW, EACH OF BORROWER AND LENDER (A) COVENANTS AND AGREES NOT TO ELECT A TRIAL BY JURY WITH RESPECT TO ANY ISSUE ARISING OUT OF THIS NOTE OR THE RELATIONSHIP BETWEEN THE PARTIES THAT IS TRIABLE OF RIGHT BY A JURY AND (B) WAIVES ANY RIGHT TO TRIAL BY JURY WITH RESPECT TO SUCH ISSUE TO THE EXTENT THAT ANY SUCH RIGHT EXISTS NOW OR IN THE FUTURE. THIS WAIVER OF RIGHT TO TRIAL BY JURY IS SEPARATELY GIVEN BY EACH PARTY, KNOWINGLY AND VOLUNTARILY WITH THE BENEFIT OF COMPETENT LEGAL COUNSEL.

35. **Time of the Essence.** Time is of the essence with respect to this Note.

36. **Modifications.** All modifications (if any) to the terms of this Note ("Modifications") are set forth on Schedule C attached to this Note. In the event of a Transfer...
under the terms of the Subordinate Security Instrument, some or all of the Modifications to this Note may be modified or rendered void by Lender at its option by notice to Borrower or such transferee.

37. **Attached Schedules.** The following Schedules are attached to this Note and are incorporated by reference herein as if more fully set forth in the text hereof:

**Schedule A – Interest Rate**

**Schedule B – Prepayment Premium**

**Schedule C – Modifications to Multifamily Permanent Note**

The terms of this Note are modified and supplemented as set forth in said Schedules. To the extent of any conflict or inconsistency between the terms of said Schedules and the text of this Note, the terms of said Schedules shall be controlling in all respects.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]
IN WITNESS WHEREOF, the undersigned has duly executed and delivered this Note or caused this Note to be duly executed and delivered by its authorized representative as of the date first set forth above.

**BORROWER:**

RESERVE AT ENGEL ROAD, LLC
a Texas limited liability company
By: MV Reserve at Engel Road LLC
   an Ohio limited liability company
Its: Managing Member
By: MV Affordable Housing LLC
   an Ohio limited liability company
Its: Sole Member

By: __________________________
Print Name: Elizabeth A. Mangan
Title: Authorized Signer
SCHEDULE A

PRINCIPAL AND INTEREST PAYMENTS

1. **Interest Rate.** Except as provided in Paragraphs 8 and 14 of this Note, interest ("Note Interest") shall accrue on the unpaid principal of this Note from, and including, the date of this Note until paid in full at an annual rate (the "Interest Rate") as follows:

   (a) **Fixed Rate.** Interest shall accrue at annual rate of three percent (3%).

   (b) **Maximum Rate.** Notwithstanding any other provision of this Note to the contrary, Note Interest shall not exceed the Maximum Rate, as the Maximum Rate may change in accordance with this Note.

   (c) **Interest Accrual.** Note Interest shall be computed on the basis of a 360-day year comprised of twelve 30-day months.

2. **Monthly Principal and Interest Payments.** Commencing on the First Payment Date and on each Loan Payment Date thereafter until and including the Maturity Date, consecutive monthly installments of principal and interest in the amount of $__________ (based upon a 35 year amortization schedule assuming a 360-day year comprised of twelve 30-day months), shall be payable on each Loan Payment Date until the entire unpaid principal balance evidenced by this Note is fully paid. Any remaining principal and interest, if not sooner paid, shall be due and payable on the Maturity Date.
SCHEDULE B

PREPAYMENT PREMIUM

YIELD MAINTENANCE OPTION:

Any prepayment premium payable under Paragraph 10 of this Note shall be computed as follows:

(a) If the prepayment is made at any time after the date of this Note and before \( \text{Yield Maintenance Period End Date} \) (the “Yield Maintenance Period End Date”) the prepayment premium shall be the greater of:

(i) 1% of the amount of principal being prepaid; or

(ii) The product obtained by multiplying:

   (A) the amount of principal being prepaid, \( by \)

   (B) the difference obtained by subtracting from the Interest Rate on this Note the Yield Rate (as defined below), on the twenty-fifth Business Day preceding (x) the date upon which any voluntary prepayment will be made, determined in accordance with Section 10 of this Note, or (y) the date Lender accelerates the Loan or otherwise accepts a prepayment pursuant to Paragraph 10(c) or Paragraph 10(d) of this Note, \( by \)

   (C) the present value factor calculated using the following formula:

   \[
   \frac{1 - (1 + r)^{n/12}}{r}
   \]

   \( r = \) Yield Rate

   \( n = \) the number of months remaining between (1) either of the following: (x) in the case of a voluntary prepayment, the last calendar day of the month during which the prepayment is made, or (y) in any other case, the date on which Lender accelerates the unpaid principal balance of this Note and (2) the Yield Maintenance Period End Date]

For purposes of this clause (ii), the “Yield Rate” means the yield calculated by interpolating the yields for the immediately shorter
and longer term U.S. “Treasury constant maturities” (as reported in the Federal Reserve Statistical Release H.15 Selected Interest Rates (the "Fed Release") under the heading "U.S. government securities") closest to the remaining term of the Prepayment Premium Period, as follows (rounded to three decimal places):

\[
\{ ( (a - b) \div (x - y) ) \times (z - y) \} + b
\]

\(a = \text{the yield for the longer U.S. Treasury constant maturity}\)
\(b = \text{the yield for the shorter U.S. Treasury constant maturity}\)
\(x = \text{the term of the longer U.S. Treasury constant maturity}\)
\(y = \text{the term of the shorter U.S. Treasury constant maturity}\)
\(z = \text{“n” (as defined in the present value factor calculation above) divided by 12.}\)

Notwithstanding any provision to the contrary, if “z” equals a term reported under the U.S. “Treasury constant maturities” subheading in the Fed Release, the yield for such term shall be used, and interpolation shall not be necessary. If publication of the Fed Release is discontinued by the Federal Reserve Board, Lender shall determine the Yield Rate from another source selected by Lender. Any determination of the Yield Rate by Lender will be binding absent manifest error.

(b) Notwithstanding the provisions of Paragraph 10 of this Note, no prepayment premium shall be payable with respect to any prepayment made on or after the Yield Maintenance Period End Date.
SCHEDULE C

MODIFICATIONS TO MULTIFAMILY PERMANENT NOTE

The following modifications are made to the text of the Note that precedes this Schedule:

None
RECORDING REQUESTED BY
AND WHEN RECORDED MAIL TO:

Citibank, N.A.
Citi Loan Closing Document Coordinator Address
Attention:  Citi Loan Closing Document Coordinator Name

Citi # 23831

SUBORDINATE MULTIFAMILY DEED OF TRUST,
ASSIGNMENT OF RENTS,
SECURITY AGREEMENT AND FIXTURE FILING
(TEXAS)

NOTICE OF CONFIDENTIALITY RIGHTS:  IF YOU ARE A NATURAL PERSON,
YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING
INFORMATION FROM ANY INSTRUMENT THAT TRANSFERS AN INTEREST IN
REAL PROPERTY BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS:
YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER’S LICENSE NUMBER.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. DEFINITIONS</td>
</tr>
<tr>
<td>2. UNIFORM COMMERCIAL CODE SECURITY AGREEMENT</td>
</tr>
<tr>
<td>3. ASSIGNMENT OF RENTS; APPOINTMENT OF RECEIVER; LENDER IN POSSESSION</td>
</tr>
<tr>
<td>4. ASSIGNMENT OF LEASES; LEASES AFFECTING THE MORTGAGED PROPERTY</td>
</tr>
<tr>
<td>5. PAYMENT OF INDEBTEDNESS; PERFORMANCE UNDER SUBORDINATE COLLATERAL LOAN DOCUMENTS</td>
</tr>
<tr>
<td>6. EXCULPATION</td>
</tr>
<tr>
<td>7. DEPOSITS FOR TAXES, INSURANCE AND OTHER CHARGES</td>
</tr>
<tr>
<td>8. COLLATERAL AGREEMENTS</td>
</tr>
<tr>
<td>9. APPLICATION OF PAYMENTS</td>
</tr>
<tr>
<td>10. COMPLIANCE WITH LAWS</td>
</tr>
<tr>
<td>11. USE OF PROPERTY</td>
</tr>
<tr>
<td>12. PROTECTION OF LENDER’S SECURITY; INSTRUMENT SECURES FUTURE ADVANCES</td>
</tr>
<tr>
<td>13. INSPECTION</td>
</tr>
<tr>
<td>14. BOOKS AND RECORDS; FINANCIAL REPORTING</td>
</tr>
<tr>
<td>15. TAXES; OPERATING EXPENSES</td>
</tr>
<tr>
<td>16. LIENS; ENCUMBRANCES</td>
</tr>
<tr>
<td>17. PRESERVATION, MANAGEMENT AND MAINTENANCE OF MORTGAGED PROPERTY</td>
</tr>
<tr>
<td>18. ENVIRONMENTAL HAZARDS</td>
</tr>
<tr>
<td>19. PROPERTY AND LIABILITY INSURANCE</td>
</tr>
<tr>
<td>20. CONDEMNATION</td>
</tr>
<tr>
<td>21. TRANSFERS OF THE MORTGAGED PROPERTY OR INTERESTS IN BORROWER [N/A FOR NON-PROFIT BORROWERS BUT INCLUDE KYC/AML LANGUAGE]</td>
</tr>
<tr>
<td>22. EVENTS OF DEFAULT</td>
</tr>
<tr>
<td>23. REMEDIES CUMULATIVE</td>
</tr>
<tr>
<td>24. FORBEARANCE</td>
</tr>
<tr>
<td>25. WAIVER OF STATUTE OF LIMITATIONS</td>
</tr>
<tr>
<td>26. WAIVER OF MARSHALLING</td>
</tr>
<tr>
<td>27. FURTHER ASSURANCES</td>
</tr>
<tr>
<td>28. ESTOPPEL CERTIFICATE</td>
</tr>
<tr>
<td>29. GOVERNING LAW; CONSENT TO JURISDICTION AND VENUE</td>
</tr>
<tr>
<td>30. NOTICE</td>
</tr>
<tr>
<td>31. CHANGE IN SERVICER</td>
</tr>
<tr>
<td>32. SINGLE ASSET BORROWER</td>
</tr>
<tr>
<td>33. SUCCESSORS AND ASSIGNS BOUND</td>
</tr>
<tr>
<td>34. JOINT AND SEVERAL LIABILITY</td>
</tr>
<tr>
<td>35. RELATIONSHIP OF PARTIES; NO THIRD PARTY BENEFICIARY</td>
</tr>
<tr>
<td>36. SEVERABILITY; AMENDMENTS</td>
</tr>
<tr>
<td>37. CONSTRUCTION</td>
</tr>
</tbody>
</table>
38. SERVICER ...................................................................................................................... 50
39. DISCLOSURE OF INFORMATION .................................................................................. 50
40. NO CHANGE IN FACTS OR CIRCUMSTANCES .......................................................... 50
41. SUBROGATION ............................................................................................................. 51
42. [FINANCING STATEMENT .......................................................................................... 51
43. STATE SPECIFIC PROVISIONS [(CALIFORNIA) ......................................................... 51
44. ATTACHED EXHIBITS .................................................................................................. 56
45. WAIVER OF TRIAL BY JURY ....................................................................................... S-1

EXHIBITS

EXHIBIT A  Description of the Land
EXHIBIT B  Modifications to Instrument (Tax Credit Provisions)
EXHIBIT C  Financing Statement Information
EXHIBIT D  [RESERVED]
EXHIBIT E  [RESERVED]
SUBORDINATE MULTIFAMILY DEED OF TRUST, ASSIGNMENT OF RENTS, SECURITY AGREEMENT AND FIXTURE FILING (TEXAS)

This SUBORDINATE MULTIFAMILY DEED OF TRUST, ASSIGNMENT OF RENTS, SECURITY AGREEMENT AND FIXTURE FILING (this “Instrument”) is dated for reference purposes only as of the ___ day of March, 2016, but will not be effective and binding on the parties hereto until the Closing Date (as hereinafter defined), by RESERVE AT ENGEL ROAD, LLC, a Texas limited liability company, whose address is 9349 WaterStone Boulevard, Suite 200, Cincinnati, Ohio 45249, as grantor (“Borrower”) to Kathy Millhouse, having an address at 325 East Hillcrest Drive, Suite 160, Thousand Oaks, California 91360, as trustee (“Trustee”), for the benefit of NEW BRAUNFELS INDUSTRIAL DEVELOPMENT CORPORATION, a nonprofit corporation created under the Texas Development Corporation Act, whose address is 424 South Castell Avenue, New Braunfels, Texas 78130, as beneficiary, and its successors and assigns (“Lender”). Borrower’s organizational identification number is 0802155311.

The Loan is made and the Indebtedness is evidenced by the Subordinate Collateral Note in the maximum principal amount of EIGHT HUNDRED THIRTY-THREE THOUSAND AND NO/100 DOLLARS ($833,000.00), maturing fifteen years after the Conversion Date (“Maturity Date”), and is secured by this Instrument. The Conversion Date is as defined in the Senior Loan Agreement (as defined in the Subordinate Collateral Loan Agreement and hereafter used) which will occur upon and subject to the Borrower’s satisfaction of the Conditions to Conversion in accordance with the Senior Loan Agreement.

NOW THEREFORE:

Granting Clause. Borrower, in consideration of the Indebtedness and the trust created by this Instrument, irrevocably grants, conveys and assigns to Trustee, in trust, with power of sale, the Mortgaged Property, including the Land located in New Braunfels, Comal County, Texas, and described in Exhibit A attached to this Instrument, to have and to hold the Mortgaged Property unto Trustee, Trustee’s successor in trust and Trustee’s assigns forever.

TO SECURE TO LENDER and its successors and assigns the repayment of the Indebtedness evidenced by the Subordinate Collateral Note executed by Borrower and maturing on the Maturity Date, and all renewals, extensions and modifications of the Indebtedness, including, without limitation, the payment of all sums advanced by or on behalf of Lender to protect the security of this Instrument under Section 12 and the performance of the covenants and agreements of Borrower contained in the Subordinate Collateral Loan Documents.

Borrower represents and warrants that Borrower is lawfully seized of the Mortgaged Property and has the right, power and authority to grant, convey and assign the Mortgaged Property, and that the Mortgaged Property is unencumbered except for the Permitted Encumbrances. Borrower covenants that Borrower will warrant and defend generally the title to the Mortgaged Property against all claims and demands, subject to any Permitted Encumbrances.
This Instrument is also a financing statement and a fixture filing under the Uniform Commercial Code of the Property Jurisdiction and the information set forth on Exhibit C is included for that purpose.

Covenants. Borrower and Lender covenant and agree as follows:

1. DEFINITIONS. The following terms, when used in this Instrument (including when used in the above recitals), shall have the following meanings:

(a) “Affiliate” means, as to any Person, any other Person that, directly or indirectly, is in control of, is controlled by or is under common control with such Person. The term “control” for these purposes means, with respect to any Person, either (i) ownership directly or through other entities of more than 50% of all beneficial equity interest in such Person, or (ii) the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such Person, through the ownership of voting securities, by contract or otherwise.

(b) “Bankruptcy Event” means any one or more of the following:

   (i) (A) the commencement of a voluntary case under one or more of the Insolvency Laws by the Borrower; (B) the acknowledgment in writing by the Borrower that it is unable to pay its debts generally as they mature; (C) the making of a general assignment for the benefit of creditors by the Borrower; (D) the commencement of an involuntary case under one or more Insolvency Laws against the Borrower; or (E) the appointment of a receiver, liquidator, custodian, sequestrator, trustee or other similar officer who exercises control over the Borrower or any substantial part of the assets of the Borrower provided that any proceeding or case under (D) or (E) above is not dismissed within 90 days after filing; or

   (ii) Both (A) an involuntary petition under any one or more of the Insolvency Laws is filed against Borrower or Borrower directly or indirectly becomes the subject of any bankruptcy, insolvency, reorganization, arrangement, readjustment of debt, dissolution, liquidation or similar proceeding relating to it under the laws of any jurisdiction, or in equity, and (B) Borrower or any Affiliate of Borrower has acted in concert or conspired with such creditors of Borrower (other than Lender) to cause the filing thereof with the intent to interfere with enforcement rights of Lender after the occurrence of an Event of Default.

(c) “Beneficiary Parties” means Lender, Servicer and their respective successors and assigns, together with any lawful owner, holder or pledgee of the Subordinate Collateral Note.
(d) “Borrower” means all persons or entities identified as “Borrower” in the first paragraph of this Instrument, together with their successors and assigns.

(e) “Borrower’s Certificate and Agreement” means that certain Borrower’s Certificate and Agreement dated as of the date hereof by Borrower for the benefit of Beneficiary Parties identified therein in connection with the Senior Loan.

(f) “Borrower’s Organizational Documents” means, collectively: (i) the certificate or articles of formation or certificate or articles of organization of Borrower filed with the Office of the Secretary of State of Texas on _________________, as the same may be amended and/or restated from time to time; and (ii) the amended and restated operating agreement of Borrower dated as of March __, 2016, as the same may be amended and/or restated from time to time.

(g) “Business Day” means any day other than (i) a Saturday or a Sunday, or (ii) a day on which federally insured depository institutions in New York, New York are authorized or obligated by law, regulation, governmental decree or executive order to be closed.

(h) “Closing Date” has the meaning ascribed thereto in the Subordinate Collateral Loan Agreement.

(i) “Controlling Interest” means (i) greater than 50% of the ownership interests in an entity, or (ii) a percentage ownership interest in an entity of 50% or less if the owner(s) of that interest actually direct(s) the business and affairs of the entity without requirement of consent of any other party.

(j) “Conversion”, “Conversion Date” and “Outside Conversion Date” shall have the respective meanings ascribed thereto in the Senior Loan Agreement.

(k) “Credit Enhancer” means a government sponsored enterprise that at any time, directly or indirectly, purchases the Loan or provides credit enhancement with respect to the Loan.

(l) “Credit Enhancer Insurance Standards” means the insurance standards and requirements set forth in the multifamily underwriting guidelines generated by the Credit Enhancer, as in effect from time to time.

(m) “Environmental Agreement” means that certain Agreement of Environmental Indemnification dated as of the date hereof made by Borrower and Guarantor (as defined in the Senior Loan Agreement) for the benefit of Beneficiary Parties identified therein in connection with the Senior Loan.

(n) “Environmental Permit” means any permit, license, or other authorization issued under any Hazardous Materials Law with respect to any activities or businesses conducted on or in relation to the Mortgaged Property.

(o) “Event of Default” means the occurrence of any event listed in Section 22.
(p) “Fixtures” means all property which is so attached to the Land or the Improvements as to constitute a fixture under applicable law, including: machinery, equipment, engines, boilers, incinerators, installed building materials; systems and equipment for the purpose of supplying or distributing heating, cooling, electricity, gas, water, air, or light; antennas, cable, wiring and conduits used in connection with radio, television, security, fire prevention, or fire detection or otherwise used to carry electronic signals; telephone systems and equipment; elevators and related machinery and equipment; fire detection, prevention and extinguishing systems and apparatus; security and access control systems and apparatus; plumbing systems; water heaters, ranges, stoves, microwave ovens, refrigerators, dishwashers, garbage disposers, washers, dryers and other appliances; light fixtures, awnings, storm windows and storm doors; pictures, screens, blinds, shades, curtains and curtain rods; mirrors; cabinets, paneling, rugs and floor and wall coverings; fences, trees and plants; swimming pools; and exercise equipment.

(q) “Governmental Authority” means any board, commission, department or body of any municipal, county, state or federal governmental unit, or any subdivision of any of them, that has or acquires jurisdiction over the Mortgaged Property or the use, operation or improvement of the Mortgaged Property.

(r) “Hazardous Materials” means petroleum and petroleum products and compounds containing them, including gasoline, diesel fuel and oil; explosives; flammable materials; radioactive materials; polychlorinated biphenyls (“PCBs”) and compounds containing them; lead and lead-based paint; asbestos or asbestos-containing materials in any form that is or could become friable; underground or above-ground storage tanks, whether empty or containing any substance; radon; Mold; toxic or mycotoxin spores; any substance the presence of which on the Mortgaged Property is prohibited by any federal, state or local authority; any substance that requires special handling; and any other material or substance (whether or not naturally occurring) now or in the future that (i) is defined as a “hazardous substance,” “hazardous material,” “hazardous waste,” “toxic substance,” “toxic pollutant,” “solid waste”, “pesticide”, “contaminant,” or “pollutant”, or otherwise classified as hazardous or toxic by or within the meaning of any Hazardous Materials Law, or (ii) is regulated in any way by or within the meaning of any Hazardous Materials Law.

(s) “Hazardous Materials Laws” means all federal, state, and local laws, ordinances and regulations and standards, rules, policies and other governmental requirements, rule of common law (including, without limitation, nuisance and trespass), consent order, administrative rulings and court judgments and decrees or other government directive in effect now or in the future and including all amendments, that relate to Hazardous Materials or to the protection or conservation of the environment or human health and apply to Borrower or to the Mortgaged Property, including, without limitation, those relating to industrial hygiene, or the use, analysis, generation, manufacture, storage, discharge, release, disposal, transportation, treatment, investigation, or remediation of Hazardous Materials. Hazardous Materials Laws include, but are not limited to, the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. Section 9601, et seq., the Resource

(t) “Imposition Deposits” shall have the meaning ascribed to such term in the Senior Loan Documents (as such term is defined in the Subordinate Collateral Loan Agreement and such meaning is used herein).

(u) “Impositions” means (i) the premiums for fire and other hazard insurance, rental loss insurance and such other insurance as Lender may require under Section 19 and (ii) Taxes.

(v) “Improvements” means the buildings, structures, improvements, and alterations now constructed or at any time in the future constructed or placed upon the Land, including any future replacements and additions.

(w) “Indebtedness” means collectively, the principal of, interest on, and all other amounts due at any time under, the Subordinate Collateral Note, this Instrument or any other Subordinate Collateral Loan Document, including prepayment premiums, late charges, default interest, and advances as provided in Section 12 to protect the security of this Instrument, and any fees or expenses paid by Lender on behalf of Borrower to Lender, or any other party for the Loan or other amounts relating to the Subordinate Collateral Loan Documents which are paid by Lender;

(x) “Initial Owners” means, with respect to Borrower or any other entity, the persons or entities who on the date of the Subordinate Collateral Note, directly or indirectly, own in the aggregate 100% of the ownership interests in Borrower or that entity.

(y) “Insolvency Laws” means the United States Bankruptcy Code, 11 U.S.C. § 101, et seq., together with any other federal or state law affecting debtor and creditor rights or relating to the bankruptcy, insolvency, reorganization, arrangement, readjustment of debt, dissolution, liquidation or similar proceeding, as amended from time to time, to the extent applicable to the Borrower.

(z) “Land” means the land described in Exhibit A.

(aa) “Leases” means all present and future leases, subleases, licenses, concessions or grants or other possessory interests now or hereafter in force, whether oral or written, covering or affecting the Mortgaged Property, or any portion of the Mortgaged Property (including proprietary leases or occupancy agreements if Borrower is a cooperative housing corporation), and all modifications, extensions or renewals.

(bb) “Lender” means the entity identified as “Lender” in the first paragraph of this Instrument, or any subsequent holder of the Subordinate Collateral Note.
(cc) “Loan” means the loan made by Lender to Borrower in an amount not to exceed the original principal amount of the Subordinate Collateral Note, which loan is evidenced by the Subordinate Collateral Note and secured by, among other things, this Instrument.

(dd) “Material Property Agreements” means any agreement which, in Lender’s sole and reasonable discretion, acting in good faith, materially affects the Mortgaged Property, the use thereof or otherwise materially affects the rights of Borrower or Beneficiary Parties in, to, and with respect to the Mortgaged Property or the proceeds therefrom, including, without limitation, each of the following: (i) any agreement regarding the payment in lieu of taxes (“PILOT”), (ii) all covenants, conditions and restrictions, including, without limitation, any declaration subjecting the Mortgaged Property to an association of owners or other community governance, (iii) any agreement regarding the abatement or exemption of real estate taxes, (iv) any easement pursuant to which the Mortgaged Property is granted access to a public right of way, (v) any material lease of all or any portion of the Mortgaged Property, (vi) any operating agreements relating to the Land or the Improvements, and (vii) any regulatory agreements, declarations, land use restriction agreements or similar instruments affecting the Mortgaged Property including the operation or use thereof.

(ee) “Maturity Date” has the meaning ascribed thereto in the recitals to this Instrument.

(ff) “MMP” means an operations and maintenance plan, moisture management program and/or microbial operations and maintenance program approved by Lender to control water intrusion and prevent the development of Mold or moisture at the Mortgaged Property throughout the term of this Instrument. If required by Lender, the MMP shall contain a provision for (i) staff training, (ii) information to be provided to tenants, (iii) documentation of the plan, (iv) the appropriate protocol for incident response and remediation and (v) routine, scheduled inspections of common space and unit interiors.

(gg) “Mold” means mold, fungus, microbial contamination or pathogenic organisms.

(hh) “Mortgaged Property” means all of Borrower’s present and future right, title and interest in and to all of the following:

(i) the Land;
(ii) the Improvements;
(iii) the Fixtures;
(iv) the Personality;
(v) all current and future rights, including air rights, development rights, zoning rights and other similar rights or interests,
easements, tenements, rights-of-way, strips and gores of land, streets, alleys, roads, sewer rights, waters, watercourses, and appurtenances related to or benefiting the Land or the Improvements, or both, and all rights-of-way, streets, alleys and roads which may have been or may in the future be vacated;

(vi) all proceeds paid or to be paid by any insurer of the Land, the Improvements, the Fixtures, the Personalty or any other part of the Mortgaged Property, whether or not Borrower obtained the insurance pursuant to Lender’s requirements;

(vii) all awards, payments and other compensation made or to be made by any municipal, state or federal authority with respect to the Land, the Improvements, the Fixtures, the Personalty or any other part of the Mortgaged Property, including any awards or settlements resulting from condemnation proceedings or the total or partial taking of the Land, the Improvements, the Fixtures, the Personalty or any other part of the Mortgaged Property under the power of eminent domain or otherwise and including any conveyance in lieu thereof;

(viii) all contracts, options and other agreements for the sale of the Land, the Improvements, the Fixtures, the Personalty or any other part of the Mortgaged Property entered into by Borrower now or in the future, including cash or securities deposited to secure performance by parties of their obligations;

(ix) all Rents and Leases;

(x) all earnings, royalties, accounts receivable, issues and profits from the Land, the Improvements or any other part of the Mortgaged Property, whether the foregoing are now due, past due, or to become due, all undisbursed proceeds of the loan secured by this Instrument, deposits forfeited by tenants, and, if Borrower is a cooperative housing corporation, maintenance charges or assessments payable by shareholders or residents;

(xi) all refunds or rebates of Impositions by any municipal, state or federal authority or insurance company (other than refunds applicable to periods before the real property tax year in which this Instrument is dated);

(xii) all tenant security deposits which have not been forfeited by any tenant under any Lease and any bond or other security in lieu of such deposits;
(xiii) all names under or by which any of the above Mortgaged Property may be operated or known, and all trademarks, trade names, and goodwill relating to any of the Mortgaged Property;

(xiv) all documents, writings, books, files, records and other documents arising from or relating to any of the foregoing, whether now existing or hereafter created; and

(xv) all proceeds from the conversion, voluntary or involuntary, of any of the above into cash or liquidated claims, and the right to collect such proceeds, and all other cash and non-cash proceeds and products of any of the foregoing.

(ii) “O&M Program” has the meaning ascribed thereto in Section 18(d).

(jj) “Permitted Encumbrances” means any easements, encumbrances or restrictions listed on the schedule of exceptions in the title insurance policy issued to Lender as of the date of recordation of this Instrument insuring Lender’s interest in the Mortgaged Property, including, without limitation, the liens securing the Senior Loan.

(kk) “Permitted Transfer” has the meaning ascribed thereto in Section 21(b).

(ll) “Person” shall mean any individual, corporation, limited liability company, partnership, joint venture, estate, trust, unincorporated association, any federal, state, county or municipal government or any bureau, department or agency thereof and any fiduciary acting in such capacity on behalf of any of the foregoing.

(mm) “Personalty” means all:

(i) accounts (including deposit accounts) of Borrower related to the Mortgaged Property;

(ii) Imposition Deposits;

(iii) equipment, goods, supplies and inventory owned by Borrower that are used now or in the future in connection with the ownership, management or operation of the Land or the Improvements or are located on the Land or in the Improvements (other than Fixtures), including furniture, furnishings, machinery, building materials, tools, books, records (whether in written or electronic form), computer equipment (hardware and software);

(iv) other tangible personal property owned by Borrower which are used now or in the future in connection with the ownership, management or operation of the Land or Improvements or are located on the Land or in the Improvements (other than Fixtures), including ranges, stoves, microwave ovens, refrigerators,
dishwashers, garbage disposers, washers, dryers and other appliances;

(v) any operating agreements relating to the Land or the Improvements;

(vi) any surveys, plans and specifications and contracts for architectural, engineering and construction services relating to the Land or the Improvements;

(vii) documents, instruments, chattel paper, claims, deposits, deposit accounts, payment intangibles, other intangible property, general intangibles, and rights relating to the operation of, or used in connection with, the Land or the Improvements, including all governmental permits relating to any activities on the Land and including subsidy or similar payments received from any sources, including a governmental authority; and

(viii) any rights of Borrower in or under letters of credit.

(nn) “Project” means that 96 unit multifamily project known as Reserve at Engel Road and located in New Braunfels, Comal County, Texas.

(oo) “Property Jurisdiction” means the State of Texas.

(pp) “Rents” means all rents (whether from residential or non-residential space), revenues and other income of the Land or the Improvements, including subsidy payments received from any sources (including, but not limited to payments under any Housing Assistance Payments Contract or similar agreements), parking fees, laundry and vending machine income and fees and charges for food, health care and other services provided at the Mortgaged Property, whether now due, past due, or to become due, and deposits forfeited by tenants.

(qq) “Senior Lender” means the holder of the Senior Loan.

(rr) “Senior Loan” means that certain loan from Citibank, N.A. to Borrower secured by a first lien on the Mortgaged Property.

(ss) "Senior Loan Agreement" means the Construction Loan Agreement of even date herewith between Citibank, N.A. and Borrower, pursuant to which the Senior Loan will be made.

(tt) “Servicer” means the servicing party that is designated by Lender (or Senior Lender, as its collateral assignee) to service the Loan, together with its successors in such capacity.

(uu) “Subordinate Collateral Loan Agreement” means that certain Loan Agreement dated as of the date hereof among Senior Lender, Borrower and Lender
relating to the Loan and the Citi Loan (as defined therein), as the same may be amended, modiﬁed or supplemented from time to time.

(vv) “Subordinate Collateral Loan Documents” means collectively, the Subordinate Collateral Loan Agreement, the Subordinate Collateral Note, this Instrument, all guaranties, all indemnity agreements, all O&M Programs, the MMP, and any other documents now or in the future executed by Borrower, or any other person in connection with the Loan, as such documents may be amended from time to time.

(ww) “Subordinate Collateral Note” means the Multifamily Subordinate Note, dated the Closing Date, executed by Borrower in favor of Lender.

(xx) “Subordinate Debt” has the meaning ascribed to that term in the Subordinate Collateral Loan Agreement.

(yy) “Taxes” means, collectively, all taxes, assessments, vault rentals and other charges, if any, general, special or otherwise, including all assessments for schools, public betterments and general or local improvements, which are levied, assessed or imposed by any public authority or quasi-public authority, and which, if not paid, will become a lien, on the Land or the Improvements.

(zz) “Transfer” means (i) a sale, assignment, transfer, or other disposition (whether voluntary, involuntary or by operation of law); (ii) the grant, creation, or attachment of a lien, encumbrance, or security interest (whether voluntary, involuntary or by operation of law); (iii) the issuance or other creation of a direct or indirect ownership interest; or (iv) the withdrawal, retirement, removal or involuntary resignation of any owner or manager of a legal entity.


2. UNIFORM COMMERCIAL CODE SECURITY AGREEMENT.

(a) This Instrument is also a security agreement under the Uniform Commercial Code for any of the Mortgaged Property which, under applicable law, may be subjected to a security interest under the Uniform Commercial Code, whether such Mortgaged Property is owned now or acquired in the future, and all products and cash and non-cash proceeds thereof (collectively, “UCC Collateral”), and Borrower hereby grants to Lender a security interest in the UCC Collateral. Borrower hereby authorizes Lender to prepare and ﬁle any and all ﬁnancing statements, continuation statements and ﬁnancing statement amendments, in such form as Lender may require to perfect or continue the perfection of this security interest without execution by Borrower. Borrower shall pay all ﬁling costs and all costs and expenses of any record searches for ﬁnancing statements and/or amendments that Lender may require. Without the prior written consent of Lender, Borrower shall not create or permit to exist any other lien or security interest in any of the UCC Collateral other than liens securing the Senior Loan or other Permitted Encumbrances. If an Event of Default has occurred and is continuing, Lender shall have the remedies of a secured party under the Uniform Commercial Code, in
addition to all remedies provided by this Instrument or existing under applicable law. In exercising any remedies, Lender may exercise its remedies against the UCC Collateral separately or together, and in any order, without in any way affecting the availability of Lender’s other remedies. This Instrument constitutes a financing statement with respect to any part of the Mortgaged Property which is or may become a Fixture.

(b) Unless Borrower gives at least thirty (30) days’ prior written notice to Lender and subject to Section 21 hereof, Borrower shall not: (i) change its name, identity, or structure of organization; (ii) change its state of organization through dissolution, merger, transfer of assets or otherwise; (iii) change its principal place of business (or chief executive office if more than one place of business); or (iv) add to or change any location at which any of the Mortgaged Property is stored, held or located. Such notice shall be accompanied by new financing statements and/or financing statement amendments in the same form as the financing statements delivered to Lender on the date hereof. Without limiting the foregoing, Borrower hereby authorizes and irrevocably appoints Lender and each of its officers attorneys-in-fact for Borrower to execute, deliver, and file, as applicable, such financing statements, continuation statements or amendments deemed necessary by Lender in its sole discretion for and on behalf of Borrower, without execution by Borrower. Borrower shall also execute and deliver to Lender modifications or supplements of this Instrument as Lender may require in connection with any change described in this Section.

3. ASSIGNMENT OF RENTS; APPOINTMENT OF RECEIVER; LENDER IN POSSESSION.

(a) As part of the consideration for the Indebtedness, Borrower absolutely and unconditionally assigns and transfers to Lender all Rents. It is the intention of Borrower to establish a present, absolute and irrevocable transfer and assignment to Lender of all Rents and to authorize and empower Lender to collect and receive all Rents without the necessity of further action on the part of Borrower. Promptly upon request by Lender, Borrower agrees to execute and deliver such further assignments of Rents as Lender may from time to time require. Borrower and Lender intend this assignment of Rents to be immediately effective and to constitute an absolute present assignment and not an assignment for additional security only. For purposes of giving effect to this absolute assignment of Rents, and for no other purpose, Rents shall not be deemed to be a part of the Mortgaged Property. However, if this present, absolute and unconditional assignment of Rents is not enforceable by its terms under the laws of the Property Jurisdiction, then the Rents shall be included as a part of the Mortgaged Property and it is the intention of Borrower that in this circumstance this Instrument creates and perfects a lien on Rents in favor of Lender, which lien shall be effective as of the date of this Instrument.

(b) Borrower represents and warrants to Lender that Borrower has not executed any prior assignment of Rents (other than an assignment of Rents securing indebtedness that will be paid off and discharged with the proceeds of the Loan or in connection with the Senior Loan), that Borrower has not performed, and Borrower covenants and agrees that it will not perform, any acts and has not executed, and shall not execute, any instrument which would prevent Lender from exercising its rights under this
Section 3, and that at the time of execution of this Instrument there has been no anticipation or prepayment of any Rents for more than two months prior to the due dates of such Rents (other than a security deposit not in excess of one month’s rent). Borrower shall not collect or accept payment of any Rents more than two months prior to the due dates of such Rents (other than a security deposit not in excess of one month’s rent).

(c) If an Event of Default has occurred and is continuing, Lender may, but shall in no event be required, regardless of the adequacy of Lender’s security or the solvency of Borrower and even in the absence of waste, enter upon and take and maintain full control of the Mortgaged Property in order to perform all acts that Lender in its discretion determines to be necessary or desirable for the operation and maintenance of the Mortgaged Property, including the execution, cancellation or modification of Leases, the collection of all Rents, the making of repairs to the Mortgaged Property and the execution or termination of contracts providing for the management, operation or maintenance of the Mortgaged Property, for the purposes of enforcing the assignment of Rents pursuant to Section 3(a), protecting the Mortgaged Property or the security of this Instrument, or for such other purposes as Lender in its discretion may deem necessary or desirable. Alternatively, if an Event of Default has occurred and is continuing, regardless of the adequacy of Lender’s security, without regard to Borrower’s solvency and without the necessity of giving prior notice (oral or written) to Borrower, Lender may apply to any court having jurisdiction for the appointment of a receiver for the Mortgaged Property to take any or all of the actions set forth in the preceding sentence. If Lender elects to seek the appointment of a receiver for the Mortgaged Property at any time after an Event of Default has occurred and is continuing, Borrower, by its execution of this Instrument, expressly consents to the appointment of such receiver, including the appointment of a receiver ex parte if permitted by applicable law. Lender or the receiver, as the case may be, shall be entitled to receive a reasonable fee for managing the Mortgaged Property. Immediately upon appointment of a receiver or immediately upon Lender’s entering upon and taking possession and control of the Mortgaged Property, Borrower shall surrender possession of the Mortgaged Property to Lender or the receiver, as the case may be, and shall deliver to Lender or the receiver, as the case may be, all documents, records (including records on electronic or magnetic media), accounts, surveys, plans, and specifications relating to the Mortgaged Property and all security deposits and prepaid Rents. In the event Lender takes possession and control of the Mortgaged Property, Lender may exclude Borrower and its representatives from the Mortgaged Property. Borrower acknowledges and agrees that the exercise by Lender of any of the rights conferred under this Section 3 shall not be construed to make Lender a mortgagee-in-possession of the Mortgaged Property so long as Lender has not itself entered into actual possession of the Land and Improvements.

(d) If Lender enters the Mortgaged Property, Lender shall be liable to account only to Borrower and only for those Rents actually received. Lender shall not be liable to Borrower, anyone claiming under or through Borrower or anyone having an interest in the Mortgaged Property, by reason of any act or omission of Lender under this Section 3, and Borrower hereby releases and discharges Lender from any such liability to the fullest extent permitted by law, except for the gross negligence or willful misconduct of Lender or its agents.
(e) If the Rents are not sufficient to meet the costs of taking control of and managing the Mortgaged Property and collecting the Rents, any funds expended by Lender for such purposes shall become an additional part of the Indebtedness as provided in Section 12.

(f) Any entering upon and taking of control of the Mortgaged Property by Lender or the receiver, as the case may be, and any application of Rents as provided in this Instrument shall not cure or waive any Event of Default or invalidate any other right or remedy of Lender under applicable law or provided for in this Instrument.

4. ASSIGNMENT OF LEASES; LEASES AFFECTING THE MORTGAGED PROPERTY.

(a) As part of the consideration for the Indebtedness, Borrower absolutely and unconditionally assigns and transfers to Lender all of Borrower’s right, title and interest in, to and under the Leases, including Borrower’s right, power and authority to modify the terms of any such Lease, or extend or terminate any such Lease. It is the intention of Borrower to establish a present, absolute and irrevocable transfer and assignment to Lender of all of Borrower’s right, title and interest in, to and under the Leases. Borrower and Lender intend this assignment of the Leases to be immediately effective and to constitute an absolute present assignment and not an assignment for additional security only. For purposes of giving effect to this absolute assignment of the Leases, and for no other purpose, the Leases shall not be deemed to be a part of the “Mortgaged Property” as that term is defined in Section 1. However, if this present, absolute and unconditional assignment of the Leases is not enforceable by its terms under the laws of the Property Jurisdiction, then the Leases shall be included as a part of the Mortgaged Property and it is the intention of Borrower that in this circumstance this Instrument creates and perfects a lien on the Leases in favor of Lender, which lien shall be effective as of the date of this Instrument.

(b) Unless an Event of Default has occurred and is continuing, Borrower shall have all rights, power and authority granted to Borrower under any Lease (except as otherwise limited by this Section or any other provision of this Instrument), including the right, power and authority to modify the terms of any Lease or extend or terminate any Lease. During the continuance of an Event of Default, the permission given to Borrower pursuant to the preceding sentence to exercise all rights, power and authority under Leases shall automatically terminate. Borrower shall comply with and observe Borrower’s obligations under all Leases, including Borrower’s obligations pertaining to the maintenance and disposition of tenant security deposits.

(c) Borrower acknowledges and agrees that the exercise by Lender, either directly or by a receiver, of any of the rights conferred under this Section 4 shall not be construed to make Lender a mortgagee-in-possession of the Mortgaged Property so long as Lender has not itself entered into actual possession of the Land and the Improvements. The acceptance by Lender of the assignment of the Leases pursuant to Section 4(a) shall not at any time or in any event obligate Lender to take any action under this Instrument or to expend any money or to incur any expenses. Lender shall not be liable in any way for
any injury or damage to person or property sustained by any person or persons, firm or corporation in or about the Mortgaged Property, except to the extent arising from the gross negligence or willful misconduct of Lender. Prior to Lender’s actual entry into and taking possession of the Mortgaged Property, Lender shall not (i) be obligated to perform any of the terms, covenants and conditions contained in any Lease (or otherwise have any obligation with respect to any Lease); (ii) be obligated to appear in or defend any action or proceeding relating to the Lease or the Mortgaged Property; or (iii) be responsible for the operation, control, care, management or repair of the Mortgaged Property or any portion of the Mortgaged Property. The execution of this Instrument by Borrower shall constitute conclusive evidence that all responsibility for the operation, control, care, management and repair of the Mortgaged Property is and shall be that of Borrower, prior to such actual entry and taking of possession.

(d) Upon delivery of notice by Lender to Borrower of Lender’s exercise of Lender’s rights under this Section 4 at any time during the continuance of an Event of Default, and without the necessity of Lender entering upon and taking and maintaining control of the Mortgaged Property directly, by a receiver, or by any other manner or proceeding permitted by the laws of the Property Jurisdiction, Lender immediately shall have all rights, powers and authority granted to Borrower under any Lease, including the right, power and authority to modify the terms of any such Lease, or extend or terminate any such Lease.

(e) Borrower shall, within seven (7) Business Days following Lender’s written request, deliver to Lender an executed copy of each residential Lease then in effect. All Leases for residential dwelling units shall (i) be on forms approved by Lender, (ii) be for initial terms of at least six (6) months and not more than two (2) years, (iii) not include options to purchase, (iv) be legally valid, binding, and enforceable obligations of the tenants, (v) contain language expressly stating that such Lease is subordinate to the lien of this Instrument and (vi) comply with all applicable laws.

(f) Except for laundry facilities and cable television services for tenants on market terms and conditions, Borrower shall not lease any portion of the Mortgaged Property for non-residential use except with the prior written consent of Lender and Lender’s prior written approval of the Lease agreement. Borrower shall not modify the terms of, or extend or terminate, any Lease for non-residential use (including any Lease in existence on the date of this Instrument) without the prior written consent of Lender. Borrower shall, without request by Lender, deliver an executed copy of each non-residential Lease to Lender promptly after such Lease is signed. All non-residential Leases, including renewals or extensions of existing Leases, shall specifically provide that (i) such Leases are subordinate to the lien of this Instrument; (ii) the tenant shall attorn to Lender and any purchaser at a foreclosure sale, such attornment to be self-executing and effective upon acquisition of title to the Mortgaged Property by any purchaser at a foreclosure sale or by Lender in any manner; (iii) the tenant agrees to execute such further evidences of attornment as Lender or any purchaser at a foreclosure sale may from time to time request; (iv) the Lease shall not be terminated by foreclosure or any other transfer of the Mortgaged Property; (v) after a foreclosure sale of the Mortgaged Property, Lender or any other purchaser at such foreclosure sale may, at
Lender’s or such purchaser’s option, accept or terminate such Lease; and (vi) the tenant shall, upon receipt after the occurrence of an Event of Default of a written request from Lender, pay all Rents payable under the Lease to Lender.

(g) Borrower shall not receive or accept Rent under any Lease (whether residential or non-residential) for more than two months in advance (other than a security deposit not in excess of one month’s rent).

5. PAYMENT OF INDEBTEDNESS; PERFORMANCE UNDER SUBORDINATE COLLATERAL LOAN DOCUMENTS; PREPAYMENT PREMIUM. Borrower shall pay the Indebtedness when due in accordance with the terms of the Subordinate Collateral Note and the other Subordinate Collateral Loan Documents and shall perform, observe and comply with all other provisions of the Subordinate Collateral Note and the other Subordinate Collateral Loan Documents.

6. EXCULPATION. The personal liability of Borrower for payment of the Subordinate Collateral Note and for performance of the other obligations to be performed by Borrower under this Instrument is limited in the manner, and to the extent, provided in the Subordinate Collateral Note.

7. RESERVED.

8. RESERVED.

9. APPLICATION OF PAYMENTS. If at any time Lender receives, from Borrower or otherwise, any amount applicable to the Indebtedness which is less than all amounts due and payable at such time, then Lender may apply that payment to amounts then due and payable in any manner and in any order determined by Lender, in Lender’s discretion. Neither Lender’s acceptance of an amount that is less than all amounts then due and payable nor Lender’s application of such payment in the manner authorized shall constitute or be deemed to constitute either a waiver of the unpaid amounts or an accord and satisfaction. Notwithstanding the application of any such amount to the Indebtedness, Borrower’s obligations under this Instrument and the Subordinate Collateral Note shall remain unchanged.

10. COMPLIANCE WITH LAWS. Borrower shall comply with all laws, ordinances, regulations and requirements of any Governmental Authority and all recorded lawful covenants and agreements relating to or affecting the Mortgaged Property, including all laws, ordinances, regulations, requirements and covenants pertaining to health and safety, construction of improvements on the Mortgaged Property, fair housing, disability accommodation, zoning and land use, and Leases. Borrower also shall comply with all applicable laws that pertain to the maintenance and disposition of tenant security deposits. Borrower shall at all times maintain records sufficient to demonstrate compliance with the provisions of this Section 10. Borrower shall take appropriate measures to prevent, and shall not engage in or knowingly permit, any illegal activities at the Mortgaged Property that could endanger tenants or visitors, result in damage to the Mortgaged Property, result in forfeiture of the Mortgaged Property, or otherwise materially impair the lien created by this Instrument or Lender’s interest in the Mortgaged
Property. Borrower represents and warrants to Lender that no portion of the Mortgaged Property has been or will be purchased with the proceeds of any illegal activity.

11. **USE OF PROPERTY.** Unless required by applicable law, Borrower shall not (a) allow changes in the use for which all or any part of the Mortgaged Property is being used at the time this Instrument was executed, except for any change in use approved by Lender, (b) convert any individual dwelling units or common areas to commercial use, (c) initiate a change in the zoning classification of the Mortgaged Property or acquiesce in a change in the zoning classification of the Mortgaged Property, (d) establish any condominium or cooperative regime with respect to the Mortgaged Property; (e) combine all or any part of the Mortgaged Property with all or any part of a tax parcel which is not part of the Mortgaged Property, or (f) subdivide or otherwise split any tax parcel constituting all or any part of the Mortgaged Property without the prior consent of Lender.

12. **PROTECTION OF LENDER’S SECURITY; INSTRUMENT SECURES FUTURE ADVANCES.**

(a) If Borrower fails to perform any of its obligations under this Instrument or any other Subordinate Collateral Loan Document after the expiration of any applicable notice and cure period, or if any action or proceeding (including a Bankruptcy Event) is commenced which purports to affect the Mortgaged Property, Lender’s security or Lender’s rights under this Instrument, including eminent domain, insolvency, code enforcement, civil or criminal forfeiture, enforcement of Hazardous Materials Laws, fraudulent conveyance or reorganizations or proceedings involving a bankrupt or decedent, then Lender at Lender’s option may make such appearances, file such documents, disburse such sums and take such actions as Lender deems necessary to perform such obligations of Borrower and to protect Lender’s interest, including (i) payment of fees, expenses and reasonable fees of attorneys, accountants, inspectors and consultants, (ii) entry upon the Mortgaged Property to make repairs or secure the Mortgaged Property, (iii) procurement of the insurance required by Section 19 (specifically including, without limitation, flood insurance if required by Section 19), and (iv) payment of amounts which Borrower has failed to pay under Sections 15 and 17.

(b) Any amounts disbursed by Lender under this Section 12, or under any other provision of this Instrument that treats such disbursement as being made under this Section 12, shall be secured by this Instrument, shall be added to, and become part of, the principal component of the Indebtedness, shall be immediately due and payable and shall bear interest from the date of disbursement until paid at the “Default Rate”, as defined in the Subordinate Collateral Note.

(c) If the Lender shall elect to pay any sum due with reference to the Project or the Mortgaged Property, the Lender may do so in reliance on any bill, statement or assessment procured from the appropriate Governmental Authority or other issuer thereof without inquiring into the accuracy or validity thereof. Similarly, in making any payments to protect the security intended to be created by this Instrument and/or the other Subordinate Collateral Loan Documents, the Lender shall not be bound to inquire into the
validity of any apparent or threatened adverse title, lien, encumbrance, claim or charge before making an advance for the purpose of preventing or removing the same.

(d) Nothing in this Section 12 shall require Lender to incur any expense or take any action.

13. INSPECTION.

(a) Subject to the rights of residential tenants under any Leases, Lender and its agents, representatives, and designees may make or cause to be made entries upon and inspections of the Mortgaged Property (including environmental inspections and tests to the extent permitted under Section 18) during normal business hours, or at any other reasonable time, upon at least 48 hours’ prior notice to Borrower and provided such entries and inspections do not unreasonably interfere with Borrower’s daily operation of the Project. Notice to Borrower shall not be required in the case of an emergency, as determined in Lender’s discretion, or when an Event of Default has occurred and is continuing.

(b) If Lender reasonably determines that Mold has developed as a result of a water intrusion event or leak, Lender, at Lender’s discretion, may require that a professional inspector inspect the Mortgaged Property as frequently as Lender determines is necessary based upon customary industry standards in the area of the Mortgaged Property until any issue with Mold and its cause(s) are resolved to Lender’s satisfaction. Such inspection shall be limited to a visual and olfactory inspection of the area that has experienced the Mold, water intrusion event or leak. Borrower shall be responsible for the cost of such professional inspection and any remediation deemed to be necessary as a result of the professional inspection. After any issue with Mold, water intrusion or leaks is remedied to Lender’s satisfaction, Lender shall not require a professional inspection any more frequently than once every three years unless Lender is otherwise aware of Mold as a result of a subsequent water intrusion event or leak.

(c) If Lender determines not to conduct an annual inspection of the Mortgaged Property, and in lieu thereof Lender requests a certification, Borrower shall be prepared to provide and must actually provide to Lender a factually correct certification each year that the annual inspection is waived to the following effect: that Borrower represents and warrants that Borrower has not received any written complaint, notice, letter or other written communication from tenants, management agent or governmental authorities regarding odors, indoor air quality, Mold or any activity, condition, event or omission that causes or facilitates the growth of Mold on or in any part of the Mortgaged Property, or if Borrower has received any such written complaint, notice, letter or other written communication, that Borrower has investigated and determined that no Mold activity, condition or event exists or alternatively has fully and properly remediated such activity, condition, event or omission in compliance with the MMP for the Mortgaged Property. If Borrower is unwilling or unable to provide such certification, Lender may require a professional inspection of the Mortgaged Property at Borrower’s expense.

14. BOOKS AND RECORDS; FINANCIAL REPORTING.
(a) Borrower shall keep and maintain at all times at the Mortgaged Property or the management agent’s offices, and upon Lender’s request shall make available at the Mortgaged Property, complete and accurate books of account and records (including copies of supporting bills and invoices) adequate to reflect correctly the operation of the Mortgaged Property, and copies of all written contracts, Leases, and other instruments which affect the Mortgaged Property. The books, records, contracts, Leases and other instruments shall be subject to examination and inspection at any reasonable time by Lender upon reasonable advance oral notice.

(b) Borrower shall furnish to Lender all of the following:

(i) (1) except as provided in clause (2) below, within 45 days after the end of each fiscal quarter of Borrower, a statement of income and expenses for Borrower’s operation of the Mortgaged Property on a year-to-date basis as of the end of each fiscal quarter, (2) within 120 days after the end of each fiscal year of Borrower, (A) a statement of income and expenses for Borrower’s operation of the Mortgaged Property for such fiscal year, (B) a statement of changes in financial position of Borrower relating to the Mortgaged Property for such fiscal year, and (C) when requested by Lender, a balance sheet showing all assets and liabilities of Borrower relating to the Mortgaged Property as of the end of such fiscal year; and (3) any of the foregoing at any other time upon Lender’s request;

(ii) Within 45 days after the end of each fiscal year of Borrower, and at any other time upon Lender’s request, a rent schedule for the Mortgaged Property showing the name of each tenant, and for each tenant, the space occupied, the lease expiration date, the rent payable for the current month, the date through which rent has been paid, and any related information requested by Lender;

(iii) within 120 days after the end of each fiscal year of Borrower, and at any other time upon Lender’s request, an accounting of all security deposits held pursuant to all Leases, including the name of the institution (if any) and the names and identification numbers of the accounts (if any) in which such security deposits are held and the name of the person to contact at such financial institution, along with any authority or release necessary for Lender to access information regarding such accounts;

(iv) within 120 days after the end of each fiscal year of Borrower, and at any other time upon Lender’s request, a statement that identifies all owners of any interest in Borrower and the interest held by each, if Borrower is a corporation, all officers and directors of Borrower, and if Borrower is a limited liability company, all managers who are not members;
(v) upon Lender’s request, a monthly property management report for the Mortgaged Property, showing the number of inquiries made and rental applications received from tenants or prospective tenants and deposits received from tenants and any other information requested by Lender;

(vi) upon Lender’s request, a balance sheet, a statement of income and expenses for Borrower and a statement of changes in financial position of Borrower for Borrower’s most recent fiscal year;

(vii) annually, if applicable, within 60 days of the date required for submission by the agency in the Property Jurisdiction responsible for monitoring the low income housing tax credit program, a low income housing tax credit compliance report in form and substance acceptable to Lender; and

(viii) if required by Lender, within 30 days of the end of each calendar month, a monthly statement of income and expenses for such calendar month on a year-to-date basis for Borrower’s operation of the Mortgaged Property.

(c) Each of the statements, schedules and reports required by Section 14(b) shall be certified to be complete and accurate by an individual having authority to bind Borrower and shall be in such form and contain such detail as Lender may require. Lender also may require that any statements, schedules or reports required by Section 14(b) be audited, if applicable, at Borrower’s expense by independent certified public accountants acceptable to Lender.

(d) If Borrower fails to provide in a timely manner the statements, schedules and reports required by Section 14(b), Lender shall have the right to have Borrower’s books and records audited, at Borrower’s expense, by independent certified public accountants selected by Lender in order to obtain such statements, schedules and reports, and all related costs and expenses of Lender shall become immediately due and payable and shall become an additional part of the Indebtedness as provided in Section 12.

(e) If an Event of Default has occurred and is continuing, Borrower shall deliver to Lender upon written demand all books and records relating to the Mortgaged Property or its operation.

(f) Borrower authorizes Lender to obtain a credit report on Borrower at any time.

15. TAXES; OPERATING EXPENSES.

(a) Subject to the provisions of Section 15(d), Borrower shall pay, or cause to be paid, all Taxes when due and before the imposition of any interest, fine, penalty or cost for nonpayment.
(b) Borrower shall pay (i) the expenses of operating, managing, maintaining and repairing the Mortgaged Property (including insurance premiums, utilities, repairs and replacements) before the last date upon which each such payment may be made without any penalty or interest charge being added, and (ii) insurance premiums at least 30 days prior to the expiration date of each policy of insurance, unless applicable law specifies some lesser period.

(c) Reserved.

(d) Borrower, at its own expense, may contest by appropriate legal proceedings, conducted diligently and in good faith, the amount or validity of any Taxes or other utility or similar charges that could become a lien on the Mortgaged Property ("Impositions"), other than insurance premiums, if (i) Borrower notifies Lender of the commencement or expected commencement of such proceedings, (ii) the Mortgaged Property is not in danger of being sold or forfeited, (iii) Borrower deposits with Lender reserves sufficient to pay the contested amount, if requested by Lender, and (iv) Borrower furnishes whatever additional security is required in the proceedings or is requested by Lender, which may include the delivery to Lender of the reserves established by Borrower to pay the contested amount.

(e) Borrower shall promptly deliver to Lender copies of all notices of, and invoices for, Impositions, and if Borrower pays any Imposition directly, Borrower shall promptly furnish to Lender on or before the date this Instrument requires such Impositions to be paid, copies of receipts evidencing that such payments were made.

(f) All payments made by Borrower to Lender pursuant to this Instrument or any of the Subordinate Collateral Loan Documents shall be free and clear of any and all tax liabilities whatsoever (other than United States federal income taxation payable by Lender) and, to the extent Lender is required to pay any such tax liabilities, Borrower shall reimburse Lender in respect of any such payment of taxes and, immediately upon request from Lender, shall deliver to Lender copies of receipts evidencing the payment of such taxes.

16. LIENS; ENCUMBRANCES. Borrower acknowledges that, to the extent provided in Section 21, the grant, creation or existence of any mortgage, deed of trust, deed to secure debt, security interest or other lien or encumbrance (a “Lien”) on the Mortgaged Property (other than the lien of this Instrument and the Permitted Encumbrances) or on certain ownership interests in Borrower, whether voluntary, involuntary or by operation of law, and whether or not such Lien has priority over the lien of this Instrument, is a “Transfer” which constitutes an Event of Default and subjects Borrower to personal liability under the Subordinate Collateral Note. Borrower shall maintain the lien created by this Instrument as a subordinate mortgage lien upon the Mortgaged Property, subject to no other Liens or encumbrances other than Permitted Encumbrances.

17. PRESERVATION, MANAGEMENT AND MAINTENANCE OF MORTGAGED PROPERTY.
(a) Borrower shall not commit waste or permit impairment or deterioration of the Mortgaged Property.

(b) Borrower shall not abandon the Mortgaged Property.

(c) Borrower shall restore or repair promptly, in a good and workmanlike manner, any damaged part of the Mortgaged Property to the equivalent of its original condition, or such other condition as Lender may approve in writing, whether or not insurance proceeds or condemnation awards are available to cover any costs of such restoration or repair.

(d) Borrower shall keep the Mortgaged Property in good repair (normal wear and tear excepted), including the replacement of Personalty and Fixtures with items of equal or better function and quality.

(e) Borrower shall provide for professional management of the Mortgaged Property by a residential rental property manager satisfactory to Lender at all times, under a contract approved by Lender, in writing, which contract must be terminable upon not more than thirty (30) days notice without the necessity of establishing cause and without payment of a penalty or termination fee by Borrower or its successors. There shall be no change in the property manager or any contract for the management of the Mortgaged Property without Lender’s prior written approval. Lender shall have the right to require that Borrower and any new property manager enter into an Assignment of Management Agreement on a form approved by Lender. If required by Lender (whether before or after an Event of Default), Borrower will cause any Affiliate of Borrower to whom fees are payable for the management of the Mortgaged Property to enter into an agreement with Lender, in a form approved by Lender, providing for subordination of those fees and such other provisions as Lender may require. “Affiliate of Borrower” means any Person controlled by, under common control with, or which controls Borrower (the term “control” for these purposes means the ability, whether by the ownership of shares or other equity interests, by contract or otherwise, to elect a majority of the directors of a corporation, to make management decisions on behalf of, or independently to select the managing partner of, a partnership, or otherwise to have the power independently to remove and then select a majority of those individuals exercising managerial authority over an entity, and control shall be conclusively presumed in the case of the ownership of 50% or more of the equity interests).

(f) Borrower shall give notice to Lender of and, unless otherwise directed in writing by Lender, shall appear in and defend any action or proceeding purporting to affect the Mortgaged Property, Lender’s security or Lender’s rights under this Instrument. Borrower shall not (and shall not permit any tenant or other person to) remove, demolish or alter the Mortgaged Property or any part of the Mortgaged Property, including any removal, demolition or alteration occurring in connection with a rehabilitation of all or part of the Mortgaged Property, except (i) in connection with the replacement of tangible Personalty, (ii) repairs and replacements in connection with making an individual unit ready for a new occupant, and (iii) as expressly permitted under the other Subordinate Collateral Loan Documents.
(g) Unless otherwise waived by Lender in writing, Borrower must have or must establish and must adhere to the MMP. If Borrower is required to have an MMP, Borrower must keep all MMP documentation at the Mortgaged Property or at the management agent’s office and available for Lender or its agents to review during any annual assessment or inspection of the Mortgaged Property that is required by Lender.

18. ENVIRONMENTAL HAZARDS.

(a) Except for matters described in Section 18(b), Borrower shall not cause or permit any of the following:

(i) the presence, use, generation, release, treatment, processing, storage (including storage in above ground and underground storage tanks), handling, or disposal of any Hazardous Materials on or under the Mortgaged Property (whether as a result of activities on the Mortgaged Property or on surrounding properties) or any other property of Borrower that is adjacent to the Mortgaged Property;

(ii) the transportation of any Hazardous Materials to, from, or across the Mortgaged Property (whether as a result of activities on the Mortgaged Property or on surrounding properties);

(iii) any occurrence or condition on the Mortgaged Property (whether as a result of activities on the Mortgaged Property or on surrounding properties) or any other property of Borrower that is adjacent to the Mortgaged Property, which occurrence or condition is or may be in violation of Hazardous Materials Laws;

(iv) any violation of or noncompliance with the terms of any Environmental Permit with respect to the Mortgaged Property or any property of Borrower that is adjacent to the Mortgaged Property;

(v) the imposition of any environmental lien against the Mortgaged Property; or

(vi) any violation or noncompliance with the terms of any O&M Program.

The matters described in clauses (i) through (vi) above, except as otherwise provided in Section 18(b), are referred to collectively in this Section 18 as “Prohibited Activities or Conditions”.

(b) Prohibited Activities or Conditions shall not include lawful conditions permitted by an O&M Program or the safe and lawful use and storage of quantities of (i) pre-packaged supplies, cleaning materials, petroleum products, household products, paints, solvents, lubricants and other materials customarily used in the construction,
renovation, operation, maintenance or use of comparable multifamily properties, (ii) cleaning materials, household products, personal grooming items and other items sold in pre-packaged containers for consumer use and used by tenants and occupants of residential dwelling units in the Mortgaged Property; and (iii) petroleum products used in the operation and maintenance of motor vehicles from time to time located on the Mortgaged Property’s parking areas, so long as all of the foregoing are used, stored, handled, transported and disposed of in compliance with Hazardous Materials Laws.

(c) Borrower shall take all commercially reasonable actions (including the inclusion of appropriate provisions in any Leases executed after the date of this Instrument) to prevent its employees, agents, and contractors, and all tenants and other occupants from causing or permitting any Prohibited Activities or Conditions. Borrower shall not lease or allow the sublease or use of all or any portion of the Mortgaged Property to any tenant or subtenant for nonresidential use by any user that, in the ordinary course of its business, would cause or permit any Prohibited Activity or Condition.

(d) If and as required by Lender, Borrower shall also establish a written operations and maintenance program with respect to certain Hazardous Materials. Each such operations and maintenance program and any additional or revised operations and maintenance programs established for the Mortgaged Property pursuant to this Instrument must be approved by Lender and shall be referred to herein as an “O&M Program.” Borrower shall comply in a timely manner with, and cause all employees, agents, and contractors of Borrower and any other persons present on the Mortgaged Property to comply with each O&M Program. Borrower shall pay all costs of performance of Borrower’s obligations under any O&M Program, and any Beneficiary Party’s out-of-pocket costs incurred by such Beneficiary Party in connection with the monitoring and review of each O&M Program and Borrower’s performance shall be paid by Borrower upon demand by such Beneficiary Party. Any such out-of-pocket costs of such Beneficiary Party which Borrower fails to pay promptly shall become an additional part of the Indebtedness as provided in Section 12.

(e) Without limitation of the foregoing, (i) Borrower hereby agrees to implement and maintain during the entire term of the Loan the O&M Program(s) required by Lender, and (ii) if asbestos-containing materials are found to exist at the Mortgaged Property, the O&M Program with respect thereto shall be undertaken consistent with the Guidelines for Controlling Asbestos-Containing Materials in Buildings (USEPA, 1985) and other relevant guidelines and applicable Hazardous Materials Laws.

(f) With respect to any O&M Program, Lender may require (i) periodic notices or reports to Lender in form, substance and at such intervals as Lender may specify; (ii) amendments to such O&M Program to address changing circumstances, laws or other matters, including, without limitation, variations in response to reports provided by environmental consultants; and (iii) execution of an Operations and Maintenance Agreement relating to such O&M Program satisfactory to Lender.
(g) Borrower represents and warrants to Beneficiary Parties that, except as otherwise disclosed in the Environmental Reports (as defined in the Environmental Agreement):

(i) Borrower has not at any time engaged in, caused or permitted any Prohibited Activities or Conditions;

(ii) to the best of Borrower’s knowledge after reasonable and diligent inquiry, no Prohibited Activities or Conditions exist or have existed, and Borrower has provided Lender with copies of all reports and information acquired in such inquiries;

(iii) the Mortgaged Property does not now contain any underground storage tanks, and, the Mortgaged Property has not contained any underground storage tanks in the past. If there is an underground storage tank located on the Mortgaged Property that has been disclosed in Exhibit A to the Environmental Agreement, that tank complies with all requirements of Hazardous Materials Laws;

(iv) Borrower has complied with and will continue to comply with all Hazardous Materials Laws, including all requirements for notification regarding releases of Hazardous Materials. Without limiting the generality of the foregoing, Borrower has obtained all Environmental Permits required for the operation of the Mortgaged Property in accordance with Hazardous Materials Laws now in effect and all such Environmental Permits are in full force and effect;

(v) no event has occurred with respect to the Mortgaged Property that constitutes, or with the passing of time or the giving of notice would constitute, noncompliance with the terms of any Environmental Permit or Hazardous Materials Law;

(vi) there are no actions, suits, claims or proceedings pending or, to the best of Borrower’s knowledge after reasonable and diligent inquiry, threatened that involve the Mortgaged Property and allege, arise out of, or relate to any Prohibited Activity or Condition;

(vii) Borrower has not received any complaint, order, notice of violation or other communication from any Governmental Authority with regard to air emissions, water discharges, noise emissions or Hazardous Materials, or any other environmental, health or safety matters affecting the Mortgaged Property or any other property of Borrower that is adjacent to the Mortgaged Property; and

(viii) no prior Remedial Work (as defined below) has been undertaken, and no Remedial Work is ongoing, with respect to the Mortgaged Property during Borrower’s ownership thereof or, to the best of
Borrower’s knowledge, at any time prior to Borrower’s ownership thereof; and

(ix) Borrower has disclosed in the Environmental Agreement all material facts known to Borrower or contained in Borrower’s records the nondisclosure of which could cause any representation or warranty made herein or any statement made in the Environmental Agreement to be false or materially misleading.

The representations and warranties in this Section 18 shall be continuing representations and warranties that shall be deemed to be made by Borrower throughout the term of the Loan, until the Indebtedness has been paid in full or otherwise discharged.

(h) Borrower shall promptly notify Lender in writing upon the occurrence of any of the following events:

(i) Borrower’s discovery of any Prohibited Activity or Condition;

(ii) Borrower’s receipt of or knowledge of any complaint, order, notice of violation or other communication from any tenant, management agent, Governmental Authority or other person with regard to present or future alleged Prohibited Activities or Conditions or any other environmental, health or safety matters affecting the Mortgaged Property or any other property of Borrower that is adjacent to the Mortgaged Property;

(iii) Borrower’s receipt of or knowledge of any personal injury claim, proceeding or cause of action directly or indirectly arising as a result of the presence of asbestos or other Hazardous Materials on or from the Mortgaged Property;

(iv) Borrower’s discovery that any representation or warranty in this Section 18 has become untrue after the date of this Instrument; and

(v) Borrower’s breach of any of its obligations under this Section 18.

Any such notice given by Borrower shall not relieve Borrower of, or result in a waiver of, any obligation under this Instrument, the Subordinate Collateral Note, or any other Subordinate Collateral Loan Document.

(i) Borrower shall pay promptly the costs of any environmental inspections, tests or audits (“Environmental Inspections”) required by Lender or any Beneficiary Party in connection with any foreclosure or deed in lieu of foreclosure, or as a condition of Lender’s consent to any Transfer under Section 21, or required by Lender following a determination by Lender that Prohibited Activities or Conditions may exist. Any such costs incurred by Lender (including, without limitation, fees and expenses of attorneys, expert witnesses, engineers, technical consultants and investigatory fees, whether
incurred in connection with any judicial or administrative process or otherwise) that Borrower fails to pay promptly shall become an additional part of the Indebtedness as provided in Section 12. The results of all Environmental Inspections made by Lender shall at all times remain the property of Lender and Lender shall have no obligation to disclose or otherwise make available to Borrower or any other party such results or any other information obtained by Lender in connection with such Environmental Inspections. Lender hereby reserves the right, and Borrower hereby expressly authorizes Lender, to make available to any party, including any prospective bidder at a foreclosure sale of the Mortgaged Property, the results of any Environmental Inspections made by Lender with respect to the Mortgaged Property. Borrower consents to Lender notifying any party (either as part of a notice of sale or otherwise) of the results of any of Lender’s Environmental Inspections. Borrower acknowledges that Lender cannot control or otherwise assure the truthfulness or accuracy of the results of any of its Environmental Inspections and that the release of such results to prospective bidders at a foreclosure sale of the Mortgaged Property may have a material and adverse effect upon the amount which a party may bid at such sale. Borrower agrees that Lender shall have no liability whatsoever as a result of delivering the results of any of its Environmental Inspections to any third party, and Borrower hereby releases and forever discharges Lender from any and all claims, damages, or causes of action, arising out of, connected with or incidental to the results of, the delivery of any of Lender’s Environmental Inspections.

(j) If any investigation, site monitoring, containment, clean-up, restoration or other remedial work (“Remedial Work”) is necessary to comply with or cure a violation of any Hazardous Materials Law or order of any Governmental Authority that has or acquires jurisdiction over the Mortgaged Property or the use, operation or improvement of the Mortgaged Property under any Hazardous Materials Law, or is otherwise required by Lender as a consequence of any Prohibited Activity or Condition or to prevent the occurrence of a Prohibited Activity or Condition, Borrower shall, by the earlier of (i) the applicable deadline required by such Hazardous Materials Law or (ii) thirty (30) days after notice from Lender demanding such action, begin performing the Remedial Work, and thereafter diligently prosecute it to completion, and shall in any event complete the work by the time required by such Hazardous Materials Law. Borrower shall promptly provide Lender with a cost estimate from an environmental consultant acceptable to Lender to complete any required Remedial Work. If required by Lender, Borrower shall promptly establish with Lender a reserve fund in the amount of such estimate. If in Lender’s opinion the amount reserved at any time during the Remedial Work is insufficient to cover the work remaining to complete the Remediation or achieve compliance, Borrower shall increase the amount reserved in compliance with Lender’s written request. All amounts so held in reserve, until disbursed, are hereby pledged to Lender as security for payment of Borrower’s obligations under this Instrument. If Borrower fails to begin on a timely basis or diligently prosecute any required Remedial Work, Lender may, at its option, cause the Remedial Work to be completed, in which case Borrower shall reimburse Lender on demand for the cost of doing so. Any reimbursement due from Borrower to Lender shall become part of the Indebtedness as provided in Section 12.
(k) Borrower shall comply with all Hazardous Materials Laws applicable to the Mortgaged Property. Without limiting the generality of the previous sentence, Borrower shall (i) obtain and maintain all Environmental Permits required by Hazardous Materials Laws and comply with all conditions of such Environmental Permits; (ii) cooperate with any inquiry by any Governmental Authority; and (iii) comply with any governmental or judicial order that arises from any alleged Prohibited Activity or Condition.

(l) BORROWER SHALL INDEMNIFY, HOLD HARMLESS AND DEFEND BENEFICIARY PARTIES AND THEIR RESPECTIVE OFFICERS, DIRECTORS, SHAREHOLDERS, PARTNERS, EMPLOYEES, AGENTS, ATTORNEYS, TRUSTEES, HEIRS AND LEGAL REPRESENTATIVES (COLLECTIVELY, THE “INDEMNITEES”) FROM AND AGAINST ALL LOSSES, PROCEEDINGS, CLAIMS, DAMAGES, PENALTIES AND COSTS (WHETHER INITIATED OR SOUGHT BY GOVERNMENTAL AUTHORITIES OR PRIVATE PARTIES), INCLUDING, WITHOUT LIMITATION, FEES AND OUT-OF-POCKET EXPENSES OF ATTORNEYS AND EXPERT WITNESSES, ENGINEERING FEES, ENVIRONMENTAL CONSULTANT FEES, INVESTIGATORY FEES, AND REMEDIATION COSTS (INCLUDING, WITHOUT LIMITATION, ANY FINANCIAL ASSURANCES REQUIRED TO BE POSTED FOR COMPLETION OF REMEDIAL WORK AND COSTS ASSOCIATED WITH ADMINISTRATIVE OVERSIGHT), AND ANY OTHER LIABILITIES OF WHATEVER KIND AND WHATEVER NATURE, WHETHER INCURRED IN CONNECTION WITH ANY JUDICIAL OR ADMINISTRATIVE PROCESS OR OTHERWISE, ARISING DIRECTLY OR INDIRECTLY FROM ANY OF THE FOLLOWING:

(i) ANY BREACH OF ANY REPRESENTATION OR WARRANTY OF BORROWER IN THIS SECTION 18;

(ii) ANY FAILURE BY BORROWER TO PERFORM ANY OF ITS OBLIGATIONS UNDER THIS SECTION 18;

(iii) THE EXISTENCE OR ALLEGED EXISTENCE OF ANY PROHIBITED ACTIVITY OR CONDITION;

(iv) THE PRESENCE OR ALLEGED PRESENCE OF HAZARDOUS MATERIALS ON OR UNDER THE MORTGAGED PROPERTY (WHETHER AS A RESULT OF ACTIVITIES ON THE MORTGAGED PROPERTY OR ON SURROUNDING PROPERTIES) OR IN ANY OF THE IMPROVEMENTS OR ON OR UNDER ANY PROPERTY OF BORROWER THAT IS ADJACENT TO THE MORTGAGED PROPERTY;

(v) THE ACTUAL OR ALLEGED VIOLATION OF ANY HAZARDOUS MATERIALS LAW;
(vi) ANY LOSS OR DAMAGE RESULTING FROM A LOSS OF PRIORITY OF THIS INSTRUMENT OR ANY OTHER SUBORDINATE COLLATERAL LOAN DOCUMENT DUE TO AN IMPOSITION OF AN ENVIRONMENTAL LIEN AGAINST THE MORTGAGED PROPERTY; AND

(vii) ANY PERSONAL INJURY CLAIM, PROCEEDING OR CAUSE OF ACTION DIRECTLY OR INDIRECTLY ARISING AS A RESULT OF THE PRESENCE OF ASBESTOS OR OTHER HAZARDOUS MATERIALS ON OR FROM THE MORTGAGED PROPERTY.

(m) COUNSEL SELECTED BY BORROWER TO DEFEND INDEMNITEES SHALL BE SUBJECT TO THE APPROVAL OF THOSE INDEMNITEES. IN ANY CIRCUMSTANCES IN WHICH THE INDEMNITY UNDER THIS SECTION 18 APPLIES, ANY BENEFICIARY PARTY MAY EMPLOY ITS OWN LEGAL COUNSEL AND CONSULTANTS TO PROSECUTE, DEFEND OR NEGOTIATE ANY CLAIM OR LEGAL OR ADMINISTRATIVE PROCEEDING AT BORROWER’S EXPENSE, AND SUCH BENEFICIARY PARTY, WITH THE PRIOR WRITTEN CONSENT OF BORROWER (WHICH SHALL NOT BE UNREASONABLY WITHHELD, DELAYED OR CONDITIONED) MAY SETTLE OR COMPROMISE ANY ACTION OR LEGAL OR ADMINISTRATIVE PROCEEDING. BORROWER SHALL REIMBURSE SUCH BENEFICIARY PARTY UPON DEMAND FOR ALL COSTS AND EXPENSES INCURRED BY SUCH BENEFICIARY PARTY, INCLUDING, WITHOUT LIMITATION, ALL COSTS OF SETTLEMENTS ENTERED INTO IN GOOD FAITH, AND THE FEES AND OUT OF POCKET EXPENSES OF SUCH ATTORNEYS AND CONSULTANTS.

(n) BORROWER SHALL NOT, WITHOUT THE PRIOR WRITTEN CONSENT OF THOSE INDEMNITEES WHO ARE NAMED AS PARTIES TO A CLAIM OR LEGAL OR ADMINISTRATIVE PROCEEDING (A “CLAIM”), SETTLE OR COMPROMISE THE CLAIM IF THE SETTLEMENT (1) RESULTS IN THE ENTRY OF ANY JUDGMENT THAT DOES NOT INCLUDE AS AN UNCONDITIONAL TERM THE DELIVERY BY THE CLAIMANT OR PLAINTIFF TO BENEFICIARY PARTIES OF A WRITTEN RELEASE OF THOSE INDEMNITEES, SATISFACTORY IN FORM AND SUBSTANCE TO LENDER; OR (2) MAY MATERIALLY AND ADVERSELY AFFECT BENEFICIARY PARTIES, AS DETERMINED BY LENDER IN ITS DISCRETION.

(o) BORROWER’S OBLIGATION TO INDEMNIFY THE INDEMNITEES SHALL NOT BE LIMITED OR IMPAIRED BY ANY OF THE FOLLOWING, OR BY ANY FAILURE OF BORROWER TO RECEIVE NOTICE OF OR CONSIDERATION FOR ANY OF THE FOLLOWING:

(i) ANY AMENDMENT OR MODIFICATION OF ANY SUBORDINATE COLLATERAL LOAN DOCUMENT;
(ii) ANY EXTENSIONS OF TIME FOR PERFORMANCE REQUIRED BY ANY SUBORDINATE COLLATERAL LOAN DOCUMENT;

(iii) ANY PROVISION IN ANY SUBORDINATE COLLATERAL LOAN DOCUMENT LIMITING BENEFICIARY PARTIES’ RECOURSE TO PROPERTY SECURING THE INDEBTEDNESS, OR LIMITING THE PERSONAL LIABILITY OF BORROWER OR ANY OTHER PARTY FOR PAYMENT OF ALL OR ANY PART OF THE INDEBTEDNESS;

(iv) THE ACCURACY OR INACCURACY OF ANY REPRESENTATIONS AND WARRANTIES MADE BY BORROWER UNDER THIS INSTRUMENT OR ANY OTHER SUBORDINATE COLLATERAL LOAN DOCUMENT;

(v) THE RELEASE OF BORROWER OR ANY OTHER PERSON, BY BENEFICIARY PARTIES OR BY OPERATION OF LAW, FROM PERFORMANCE OF ANY OBLIGATION UNDER ANY SUBORDINATE COLLATERAL LOAN DOCUMENT;

(vi) THE RELEASE OR SUBSTITUTION IN WHOLE OR IN PART OF ANY SECURITY FOR THE INDEBTEDNESS; AND

(vii) FAILURE BY BENEFICIARY PARTIES TO PROPERLY PERFECT ANY LIEN OR SECURITY INTEREST GIVEN AS SECURITY FOR THE INDEBTEDNESS.

(p) BORROWER SHALL, AT ITS OWN COST AND EXPENSE, DO ALL OF THE FOLLOWING:

(i) PAY OR SATISFY ANY JUDGMENT OR DECREE THAT MAY BE ENTERED AGAINST ANY INDEMNITEE OR INDEMNITEES IN ANY LEGAL OR ADMINISTRATIVE PROCEEDING INCIDENT TO ANY MATTERS AGAINST WHICH INDEMNITEES ARE ENTITLED TO BE INDEMNIFIED UNDER THIS SECTION 18;

(ii) REIMBURSE INDEMNITEES FOR ANY AND ALL EXPENSES PAID OR INCURRED IN CONNECTION WITH ANY MATTERS AGAINST WHICH INDEMNITEES ARE ENTITLED TO BE INDEMNIFIED UNDER THIS SECTION 18; AND

(iii) REIMBURSE INDEMNITEES FOR ANY AND ALL EXPENSES, INCLUDING, WITHOUT LIMITATION, FEES AND OUT OF POCKET EXPENSES OF ATTORNEYS AND EXPERT WITNESSES, PAID OR INCURRED IN
CONNECTION WITH THE ENFORCEMENT BY INDEMNITEES OF THEIR RIGHTS UNDER THIS SECTION 18, OR IN MONITORING AND PARTICIPATING IN ANY LEGAL OR ADMINISTRATIVE PROCEEDING.

(q) THE PROVISIONS OF THIS SECTION 18 SHALL BE IN ADDITION TO ANY AND ALL OTHER OBLIGATIONS AND LIABILITIES THAT BORROWER MAY HAVE UNDER APPLICABLE LAW OR UNDER ANY OTHER SUBORDINATE COLLATERAL LOAN DOCUMENT, AND EACH INDEMNITEE SHALL BE ENTITLED TO INDEMNIFICATION UNDER THIS SECTION 18 WITHOUT REGARD TO WHETHER ANY OTHER BENEFICIARY PARTY OR THAT INDEMNITEE HAS EXERCISED ANY RIGHTS AGAINST THE MORTGAGED PROPERTY OR ANY OTHER SECURITY, OR PURSUED ANY OTHER RIGHTS AVAILABLE UNDER THE SUBORDINATE COLLATERAL LOAN DOCUMENTS OR APPLICABLE LAW. IF BORROWER CONSISTS OF MORE THAN ONE PERSON OR ENTITY, THE OBLIGATION OF THOSE PERSONS OR ENTITIES TO INDEMNIFY THE INDEMNITEES UNDER THIS SECTION 18 SHALL BE JOINT AND SEVERAL. THE OBLIGATION OF BORROWER TO INDEMNIFY THE INDEMNITEES UNDER THIS SECTION 18 SHALL SURVIVE ANY REPAYMENT OR DISCHARGE OF THE INDEBTEDNESS, ANY FORECLOSURE PROCEEDING, ANY FORECLOSURE SALE, ANY DELIVERY OF ANY DEED IN LIEU OF FORECLOSURE, AND ANY RELEASE OF RECORD OF THE LIEN OF THIS INSTRUMENT.

(r) Notwithstanding anything herein to the contrary, (i) Borrower shall have no obligation hereunder to indemnify any Indemnitee for any liability under this Section 18 to the extent that the Prohibited Activity or Condition giving rise to such liability resulted solely from the gross negligence or willful misconduct of such Indemnitee, and (ii) Borrower’s liability under this Section 18 shall not extend to cover the violation of any Hazardous Materials Laws or Prohibited Activities or Conditions that first arise, commence or occur as a result of actions of Lender, its successors, assigns or designees, after the satisfaction, discharge, release, assignment, termination or cancellation of this Instrument following the payment in full of the Subordinate Collateral Note and all other sums payable under the Subordinate Collateral Loan Documents or after the actual dispossession from the entire Mortgaged Property of Borrower and all entities which control, are controlled by, or are under common control with Borrower following foreclosure of this Instrument or acquisition of the Mortgaged Property by a deed in lieu of foreclosure.

19. PROPERTY AND LIABILITY INSURANCE.

(a) Borrower shall keep the Improvements insured at all times against such hazards as Lender may from time to time require, which insurance shall include but not be limited to coverage against loss by fire and allied perils, general boiler and machinery coverage, business income coverage and extra expense insurance, coverage against acts of terrorism, mold and earthquake coverage. Borrower acknowledges and agrees that Lender’s insurance requirements may change from time to time throughout the term of
the Indebtedness. If Lender so requires, such insurance shall also include sinkhole insurance, mine subsidence insurance, earthquake insurance, and, if the Mortgaged Property does not conform to applicable zoning or land use laws, building ordinance or law coverage. If any portion of the Improvements is at any time located in an area identified by the Federal Emergency Management Agency (or any successor to that agency) as an area now or hereafter having special flood hazards, and if flood insurance is available in that area, Borrower shall insure such Improvements against loss by flood in an amount equal to the maximum amount available under the National Flood Insurance Program or any successor thereto.

(b) All premiums on insurance policies required under Section 19(a) shall be paid on or prior to the date such premium is due. All such policies shall also be in a form approved by Lender. All policies of property damage insurance shall include a non-contributing, non-reporting mortgage clause in favor of, and in a form approved by, Lender. Subject to the rights of the Senior Lender or any other holder of a loan secured by a deed of trust or mortgage recorded prior to the Subordinate Collateral Security Instrument, Lender shall have the right to hold the original policies or duplicate original policies of all insurance required by Section 19(a). Borrower shall promptly deliver to Lender a copy of all renewal and other notices received by Borrower with respect to the policies and all receipts for paid premiums. At least 30 days prior to the expiration date of a policy, Borrower shall deliver to Lender the original (or a duplicate original) of a renewal policy in form satisfactory to Lender.

(c) All insurance policies and renewals of insurance policies required by this Section 19 shall be in such amounts and for such periods as Lender may from time to time require consistent with Lender’s then current practices and standards, and shall be issued by insurance companies satisfactory to Lender.

(d) During any period of construction and/or rehabilitation, and at all times prior to occupancy of the Project by any tenants following the completion of the construction and/or rehabilitation of the Project in accordance with the Subordinate Collateral Loan Agreement, the following provisions shall apply, in addition to the other provisions of this Section 19 and without limiting the generality of the other provisions of this Section 19:

(i) Borrower shall provide (or cause to be provided), maintain and keep in force, the following insurance coverage:

(A) Builder’s “all risk” insurance or the equivalent coverage, including theft, to insure all buildings, machinery, equipment, materials, supplies, temporary structures and all other property of any nature on-site, off-site and while in transit which is to be used in fabrication, erection, installation and construction and/or rehabilitation of the Project, and to remain in effect until the entire Project has been completed and accepted by Borrower and is first occupied by any tenants (provided that in any event, such coverage shall remain in effect until such time as Borrower has provided
Lender with evidence of property insurance covering the Improvements and meeting the requirements of this Section 19). Such insurance shall be provided on a replacement cost value basis and shall include foundations, other underground property, tenant improvements and personal property. If tenant improvements and personal property are not included in the above coverage, they may be insured separately by Borrower provided coverage is acceptable to Lender. Builders “all risk” insurance shall (i) be on a nonreporting, completed value form, (ii) cover soft costs, debris removal expense (including removal of pollutants), resulting loss and damage to property due to faulty or defective workmanship or materials and error in design or specification, loss while the property is in the care, custody and control of others to whom the property may be entrusted, (iii) provide that Borrower can complete and occupy the Mortgaged Property without further written consent from the insurer, and (iv) cover loss of income resulting from delay in occupancy and use of the Mortgaged Property due to loss. During the initial construction and/or rehabilitation of the Project and until such time as the Project is first occupied by any tenants, the Borrower shall not be required to maintain property insurance as required by this Section 19 for so long as Builder’s “all risk” insurance or equivalent coverage is maintained in accordance with this paragraph.

(B) If any portion of the Mortgaged Property is or becomes located in an area identified by the United States Secretary of Housing and Urban Development as an area having special flood hazards and in which flood insurance has been made available under the National Flood Insurance Act of 1968 and Flood Disaster Protection Act of 1973, as amended, Borrower shall also keep the improvements and the equipment located thereon insured against loss by flood in an amount at least equal to the principal amount of the Loan or the maximum limits of coverage available with respect to the Mortgaged Property, whichever is less. All such insurance shall also cover continuing expenses not directly involved in the direct cost of construction, rehabilitation or renovation, including interest on money borrowed to finance construction, rehabilitation or renovation, continuing interest on the Loan, advertising, promotion, real estate taxes and other assessments, the cost of renegotiating leases, and other expenses incurred as the result of property loss or destruction by the insured peril. Such coverage shall not contain any monthly limitation.

(ii) If Lender fails to receive proof and evidence of the insurance required hereunder, Lender shall have the right, but not the obligation, to obtain or cause to be obtained current coverage and in its sole discretion, advance funds to pay the premiums for it. If Lender makes an advance for such
purpose, Borrower shall repay such advance immediately on demand and such advance shall be considered to be a demand loan to Borrower bearing interest at the Default Rate (as defined by the Subordinate Collateral Note) and secured by the Mortgaged Property.

(e) Borrower shall maintain at all times commercial general liability insurance, workers’ compensation insurance and such other liability, errors and omissions and fidelity insurance coverages as Lender may from time to time require, consistent with Lender’s then current practices and standards (and from and after the Conversion Date, any applicable Credit Enhancer Insurance Standards).

(f) Borrower shall comply with all insurance requirements and shall not permit any condition to exist on the Mortgaged Property that would invalidate any part of any insurance coverage that this Instrument requires Borrower to maintain.

(g) In the event of loss, Borrower shall give immediate written notice to the insurance carrier and to Lender. Subject to the rights of the Senior Lender or any other holder of a loan secured by a deed of trust or mortgage recorded prior to the Subordinate Collateral Security Instrument, Borrower hereby authorizes and appoints Lender as attorney-in-fact for Borrower to make proof of loss, to adjust and compromise any claims under policies of property damage insurance, to appear in and prosecute any action arising from such property damage insurance policies, to collect and receive the proceeds of property damage insurance, and to deduct from such proceeds Lender’s expenses incurred in the collection of such proceeds. This power of attorney is coupled with an interest and therefore is irrevocable. However, nothing contained in this Section 19 shall require Lender to incur any expense or take any action. Lender may, at Lender’s option, (i) hold the balance of such proceeds to be used to reimburse Borrower for the cost of restoring and repairing the Mortgaged Property to the equivalent of its original condition or to a condition approved by Lender (the “Restoration”), or (ii) apply the balance of such proceeds to the payment of the Indebtedness, whether or not then due. To the extent Lender determines to apply insurance proceeds to Restoration, Lender shall apply the proceeds in accordance with Lender’s then-current policies relating to the restoration of casualty damage on similar multifamily properties.

(h) Lender shall not exercise its option to apply insurance proceeds to the payment of the Indebtedness if all of the following conditions are met: (i) no Event of Default (or any event which, with the giving of notice or the passage of time, or both, would constitute an Event of Default) has occurred and is continuing; (ii) Lender determines, in its reasonable discretion, that there will be sufficient funds to complete the Restoration (and complete construction of the Project in accordance with the Subordinate Collateral Loan Agreement and the Plans and Specifications, as defined in the Senior Loan Documents, if such construction has not been completed at such time); (iii) Lender determines, in its discretion, that the net operating income generated by the Mortgaged Property after completion of the Restoration will be sufficient to meet all operating costs and other expenses, Imposition Deposits, deposits to reserves and loan repayment obligations relating to the Mortgaged Property; (iv) Lender determines, in its discretion, that the Restoration will be completed before the earlier of (A) one year before the
Subordinate Multifamily Deed of Trust

(i) If the Mortgaged Property is sold at a foreclosure sale or Lender acquires title to the Mortgaged Property, Lender shall automatically succeed to all rights of Borrower in and to any insurance policies and unearned insurance premiums and in and to the proceeds resulting from any damage to the Mortgaged Property prior to such sale or acquisition.

(j) Unless Lender otherwise agrees in writing, any application of any insurance proceeds to the Indebtedness shall not extend or postpone the due date of any annual installments referred to in the Subordinate Collateral Note or change the amount of such installments, except as provided in the Subordinate Collateral Note.

(k) Borrower agrees to execute such further evidence of assignment of any insurance proceeds as Lender may require.

(l) Borrower further agrees that to the extent that Borrower obtains any form of property damage insurance for the Mortgaged Property or any portion thereof that insures perils not required to be insured against by Lender, such policy of property damage insurance shall include a standard mortgagee clause and shall name Lender as loss payee and, within ten (10) days following Borrower’s purchase of such additional insurance, Borrower shall cause to be delivered to Lender a duplicate original policy of insurance with respect to such policy. Any insurance proceeds payable to Borrower under such policy shall be additional security for the Indebtedness and Lender shall have the same rights to such policy and proceeds as it has with respect to insurance policies required by Lender pursuant to this Section 19 (except that Lender shall not require that the premium for such additional insurance be included among the Imposition Deposits).

20. CONDEMNATION.

(a) Borrower shall promptly notify Lender in writing of any action or proceeding or notice relating to any proposed or actual condemnation or other taking, or conveyance in lieu thereof, of all or any part of the Mortgaged Property, whether direct or indirect (a “Condemnation”), and shall deliver to the Lender copies of any and all papers served in connection with such Condemnation. Borrower shall appear in and prosecute or defend any action or proceeding relating to any Condemnation unless otherwise directed by Lender in writing. Borrower authorizes and appoints Lender as attorney-in-fact for Borrower to commence, appear in and prosecute, in Lender’s or Borrower’s name, any action or proceeding relating to any Condemnation and to settle or compromise any claim in connection with any Condemnation. This power of attorney is coupled with an interest and therefore is irrevocable. However, nothing contained in this Section 20 shall require Lender to incur any expense or take any action. Borrower hereby transfers and assigns to Lender all right, title and interest of Borrower in and to any
award or payment with respect to (i) any Condemnation, or any conveyance in lieu of
Condemnation, and (ii) any damage to the Mortgaged Property caused by governmental
action that does not result in a Condemnation.

(b) Subject to the rights of the Senior Lender or any other holder of a loan
secured by a deed of trust or mortgage recorded prior to the Subordinate Collateral
Security Instrument, Lender may apply such awards or proceeds, after the deduction of
Lender’s expenses incurred in the collection of such amounts (including, without
limitation, fees and out-of-pocket expenses of attorneys and expert witnesses,
investigatory fees, whether incurred in connection with any judicial or administrative
process or otherwise), at Lender’s option, to the restoration or repair of the Mortgaged
Property or to the payment of the Indebtedness in accordance with the provisions of the
Subordinate Collateral Note as to application of payments to the Indebtedness, with the
balance, if any, to Borrower. Unless Lender otherwise agrees in writing, any application
of any awards or proceeds to the Indebtedness shall not extend or postpone the due date
of payments due under the Subordinate Collateral Note or change the amount of such
payments, except as otherwise provided in the Subordinate Collateral Note. Borrower
agrees to execute such further evidence of assignment of any awards or proceeds as
Lender may require.

(c) Lender shall not exercise its option to apply Condemnation proceeds to the
payment of the Indebtedness if all of the following conditions are met: (i) no Event of
Default (or any event which, with the giving of notice or the passage of time, or both,
would constitute an Event of Default) has occurred and is continuing; (ii) Lender
determines, in its reasonable discretion, that there will be sufficient funds to complete
construction of the Project in accordance with the Subordinate Collateral Loan
Agreement and the Plans and Specifications, as defined in the Senior Loan Documents, if
such construction has not been completed at such time of the Condemnation; (iii) Lender
determines, in its discretion, that the net operating income generated by the Mortgaged
Property after Condemnation will be sufficient to meet all operating costs and other
expenses, Imposition Deposits, deposits to reserves and loan repayment obligations
relating to the Mortgaged Property; (iv) Lender determines, in its discretion, that the
construction of the Project will be completed before the earlier of (A) one year before the
maturity date of the Subordinate Collateral Note (or one year before the Outside
Conversion Date, if Conversion has not yet occurred) or (B) one year after the date of the
loss or casualty, if such construction has not been completed at such time of the
Condemnation; and (v) upon Lender’s request, Borrower provides Lender evidence of the
availability during and after the Condemnation of the insurance required to be maintained
pursuant to this Instrument.

Borrower covenants that it shall comply with all applicable legal requirements or internal
requirements of Lender relating to money laundering, anti-terrorism, trade embargos and
economic sanctions, now or hereafter in effect. Without limiting the foregoing, Borrower shall
not take any action, or permit any action to be taken, that would cause Borrower’s
representations and warranties in this Section 20 to become untrue or inaccurate at any time
during the term of the Loan. Upon Lender’s request from time to time during the term of the
Loan, Borrower shall certify in writing to Lender that Borrower’s representations, warranties and
obligations under this Section 20 remain true and correct and have not been breached, and in addition, upon request of Lender, Borrower covenants to provide all information required to satisfy requesting Lender’s obligations under all applicable legal requirements or internal requirements of Lender relating to money laundering, anti-terrorism, trade embargos and economic sanctions, now or hereafter in effect, during the term of the Loan. Borrower shall immediately notify Lender in writing of Borrower’s actual knowledge that any of such representations, warranties or covenants are no longer true and have been breached or if Borrower has a reasonable basis to believe that they may no longer be true or have been breached or that any other violation of the applicable legal requirements or internal requirements of Lender relating to money laundering, anti-terrorism, trade embargos and economic sanctions, now or hereafter in effect, has occurred or is being investigated by Governmental Authorities. In connection with such an event, Borrower shall comply with all applicable legal requirements or internal requirements of Lender relating to money laundering, anti-terrorism, trade embargos and economic sanctions, now or hereafter in effect, has occurred or is being investigated by Governmental Authorities. In connection with such an event, Borrower shall comply with all applicable legal requirements or internal requirements of Lender relating to money laundering, anti-terrorism, trade embargos and economic sanctions, now or hereafter in effect, has occurred or is being investigated by Governmental Authorities. In connection with such an event, Borrower shall comply with all applicable legal requirements or internal requirements of Lender relating to money laundering, anti-terrorism, trade embargos and economic sanctions, now or hereafter in effect, has occurred or is being investigated by Governmental Authorities. In connection with such an event, Borrower shall comply with all applicable legal requirements or internal requirements of Lender relating to money laundering, anti-terrorism, trade embargos and economic sanctions, now or hereafter in effect, has occurred or is being investigated by Governmental Authorities.

21. TRANSFERS OF THE MORTGAGED PROPERTY OR INTERESTS IN BORROWER.

(a) The occurrence of any of the following events shall constitute an Event of Default under this Instrument:

(i) other than the lien of this Instrument and the Permitted Encumbrances, a Transfer of all or any part of the Mortgaged Property or any interest in the Mortgaged Property;

(ii) a Transfer of a Controlling Interest in Borrower;

(iii) a Transfer of a Controlling Interest in any entity which owns, directly or indirectly through one or more intermediate entities, a Controlling Interest in Borrower;

(iv) if Borrower is a trust, the termination or revocation of such trust; unless the trust is terminated as a result of the death of an individual trustor, in which event Lender must be notified and such Borrower must be replaced with an individual or entity acceptable to Lender, in accordance with the provisions of Section 21(c) hereof, within 90 days of such death (provided however that no
property inspection shall be required and a 1% transfer fee will not
be charged);

(v) the merger, dissolution, liquidation, or consolidation of (i)
Borrower, or (ii) any legal entity holding, directly or indirectly, a
Controlling Interest in Borrower;

(vi) a conversion of Borrower from one type of legal entity into another
type of legal entity (including the conversion of a general
partnership into a limited partnership and the conversion of a
limited partnership into a limited liability company), whether or
not there is a Transfer; if such conversion results in a change in
any assets, liabilities, legal rights or obligations of Borrower (or of
any general partner of Borrower, as applicable), by operation of
law or otherwise;

(vii) a Transfer of the economic benefits or right to cash flows
attributable to the ownership interests in Borrower, separate from
the Transfer of the underlying ownership interests, unless the
Transfer of the underlying ownership interests would otherwise not
be prohibited by this Instrument; and

(viii) the filing, recording, or consent to filing or recording of any plat or
map subdividing, replatting or otherwise affecting the Mortgaged
Property or any other replat or subdivision of the Mortgaged
Property, whether or not any such action affects the priority of the
lien of this Instrument.

Lender shall not be required to demonstrate any actual impairment of its security or any
increased risk of default in order to exercise any of its remedies with respect to an Event of
Default under this Section 21.

(b) The occurrence of any of the following events shall not constitute an
Event of Default under this Instrument, notwithstanding any provision of Section 21(a) to
the contrary (each, a “Permitted Transfer”):

(i) a Transfer to which Lender has consented;

(ii) except as provided in Section 21(a)(vi) and (vii), a Transfer that
occurs by devise, descent, pursuant to the provisions of a trust, or
by operation of law upon the death of a natural person;

(iii) the grant of a leasehold interest in an individual dwelling unit for a
term of two years or less not containing an option to purchase;

(iv) a Transfer of obsolete or worn out Personalty or Fixtures that are
contemporaneously replaced by items of equal or better function
and quality, which are free of liens, encumbrances and security
interests other than those created by or permitted pursuant to the Subordinate Collateral Loan Documents or consented to by Lender;

(v) the grant of an easement, servitude, or restrictive covenant if, before the grant, Lender determines that the easement, servitude, or restrictive covenant will not materially affect the operation or value of the Mortgaged Property or Lender’s interest in the Mortgaged Property, and Borrower pays to Lender, upon demand, all costs and expenses incurred by Lender in connection with reviewing Borrower’s request;

(vi) the creation of a mechanic’s, materialman’s, or judgment lien against the Mortgaged Property which is released of record or otherwise remedied to Lender’s satisfaction within 45 days after Borrower has actual or constructive notice of the existence of such lien; and

(vii) the conveyance of the Mortgaged Property at a judicial or non-judicial foreclosure sale under this Instrument.

(c) Lender shall consent to a Transfer that would otherwise violate this Section 21 if, prior to the Transfer, Borrower has satisfied each of the following requirements:

(i) the submission to Lender of all information required by Lender to make the determination required by this Section 21(c);

(ii) the absence of any Event of Default;

(iii) the transferee meets all of the eligibility, credit, management, and other standards (including any standards with respect to previous relationships between Lender and the transferee and the organization of the transferee) customarily applied by Lender at the time of the proposed Transfer to the approval of borrowers in connection with the origination or purchase of similar mortgage finance structures on similar multifamily properties, unless partially waived by Lender in exchange for such additional conditions as Lender may require;

(iv) the Mortgaged Property, at the time of the proposed Transfer, meets all standards as to its physical condition that are customarily applied by Lender at the time of the proposed Transfer to the approval of properties in connection with the origination or purchase of similar mortgage finance structures on similar multifamily properties, unless partially waived by Lender in exchange for such additional conditions as Lender may require;
(v) if transferor or any other person has obligations under any Subordinate Collateral Loan Document, the execution by the transferee or one or more individuals or entities acceptable to Lender of an assumption agreement that is acceptable to Lender and that, among other things, requires the transferee to perform all obligations of transferor or such person set forth in such Subordinate Collateral Loan Document, and may require that the transferee comply with any provisions of this Instrument or any other Subordinate Collateral Loan Document which previously may have been waived by Lender;

(vi) Lender’s receipt of all of the following:

(A) a non refundable review fee in the amount of $3,000 and a transfer fee equal to 1 percent of the outstanding Indebtedness immediately prior to the Transfer; and

(B) Borrower’s reimbursement of all of Lender’s out-of-pocket costs (including reasonable attorneys’ fees) incurred in reviewing the Transfer request, to the extent such expenses exceed $3,000; and

(vii) Borrower has agreed to Lender’s conditions to approve such Transfer, which may include, but are not limited to (A) providing additional collateral, guaranties, or other credit support to mitigate any risks concerning the proposed transferee or the performance or condition of the Mortgaged Property, and (B) amending the Subordinate Collateral Loan Documents to (i) delete any specially negotiated terms or provisions previously granted for the exclusive benefit of transferor and (ii) restore to original provisions of the standard Lender’s form multifamily loan documents, to the extent such provisions were previously modified.

(d) For purposes of this Section, the following terms shall have the meanings set forth below:

(i) A Transfer of a “Controlling Interest” shall mean:

(A) with respect to any entity, the following:

(1) if such entity is a general partnership or a joint venture, a Transfer of any general partnership interest or joint venture interest which would cause the Initial Owners to own less than 51% of all general partnership or joint venture interests in such entity;

(2) if such entity is a limited partnership, (A) a Transfer of any general partnership interest, or (B) a Transfer of any
partnership interests which would cause the Initial Owners to own less than 51% of all limited partnership interests in such entity;

(3) if such entity is a limited liability company or a limited liability partnership, (A) a Transfer of any membership or other ownership interest which would cause the Initial Owners to own less than 51% of all membership or other ownership interests in such entity, (B) a Transfer of any membership, or other interest of a manager, in such entity that results in a change of manager, or (C) a change of the non-member manager;

(4) if such entity is a corporation (other than a Publicly-Held Corporation) with only one class of voting stock, a Transfer of any voting stock which would cause the Initial Owners to own less than 51% of voting stock in such corporation;

(5) if such entity is a corporation (other than a Publicly-Held Corporation) with more than one class of voting stock, a Transfer of any voting stock which would cause the Initial Owners to own less than a sufficient number of shares of voting stock having the power to elect the majority of directors of such corporation; and

(6) if such entity is a trust (other than a Publicly-Held Trust), the removal, appointment or substitution of a trustee of such trust other than (A) in the case of a land trust, or (B) if the trustee of such trust after such removal, appointment, or substitution is a trustee identified in the trust agreement approved by Lender; and/or

(B) any agreement (including provisions contained in the organizational and/or governing documents of Borrower) or Transfer not specified in clause (A), the effect of which, either immediately or after the passage of time or occurrence of a specified event or condition, including the failure of a specified event or condition to occur or be satisfied, would (i) cause a change in or replacement of the Person that controls the management and operations of the Borrower or (ii) limit or otherwise modify the extent of such Person’s control over the management and operations of Borrower.

(ii) “Publicly-Held Corporation” shall mean a corporation the outstanding voting stock of which is registered under Section 12(b) or 12(g) of the Securities and Exchange Act of 1934, as amended.

(iii) “Publicly-Held Trust” shall mean a real estate investment trust the outstanding voting shares or beneficial interests of which are
registered under Section 12(b) or 12(g) of the Securities Exchange Act of 1934, as amended.

(e) Lender shall be provided with written notice of all Transfers under this Section 21, whether or not such Transfers are permitted under Section 21(b) or approved by Lender under Section 21(c), no later than 10 days prior to the date of the Transfer.

22. EVENTS OF DEFAULT. The occurrence of any one or more of the following shall constitute an Event of Default under this Instrument:

(a) (i) any failure by Borrower to pay or deposit any payment of principal, interest, any payment with a specified due date, or any other scheduled payment or deposit required by the Subordinate Collateral Note, this Instrument or any other Subordinate Collateral Loan Document when such payment or deposit is due or (ii) any failure by Borrower to pay or deposit any unscheduled payment or deposit, or other payment or deposit without a specified due date, required by the Subordinate Collateral Note, this Instrument or any other Subordinate Collateral Loan Document, within five (5) days after written notice from Lender;

(b) any failure by Borrower to maintain the insurance coverage required by Section 19;

(c) any failure by Borrower to comply with the provisions of Section 32;

(d) fraud or material misrepresentation or material omission by Borrower, or any of its respective officers, directors, trustees, general partners, managing members, managers, agents or representatives in connection with (i) the application for the Loan, (ii) any financial statement, rent roll, or other report or information provided to Lender during the term of the Indebtedness, or (iii) any request for Lender’s consent to any proposed action,;

(e) any of Borrower’s representations and warranties in this Instrument is false or misleading in any material respect;

(f) any Event of Default under Section 21;

(g) the commencement of a forfeiture action or proceeding, whether civil or criminal, which, in Lender’s judgment, could result in a forfeiture of the Mortgaged Property or otherwise materially impair the lien created by this Instrument or Lender’s interest in the Mortgaged Property;

(h) any failure by Borrower to perform or comply with any of its obligations under this Instrument (other than those specified in this Section 22), as and when required, which continues for a period of thirty (30) days after written notice of such failure by Lender to Borrower; provided, however, if such failure is susceptible of cure but cannot reasonably be cured within such thirty (30) day period, and the Borrower shall have commenced to cure such failure within such thirty (30) day period and thereafter diligently and expeditiously proceeds to cure the same, such thirty (30) day period shall
be extended for an additional period of time as is reasonably necessary for the Borrower in the exercise of due diligence to cure such failure, such additional period not to exceed sixty (60) days. However, no such notice or grace period shall apply to the extent such failure could, in Lender’s judgment, absent immediate exercise by Lender of a right or remedy under this Instrument, result in harm to Lender, impairment of the Subordinate Collateral Note or this Instrument or any other security given under any other Subordinate Collateral Loan Document;

(i) any failure by Borrower to perform any of its obligations as and when required under any Subordinate Collateral Loan Document other than this Instrument which continues beyond the applicable cure period, if any, specified in that Subordinate Collateral Loan Document;

(j) any exercise by the holder of any debt instrument secured by a mortgage, deed of trust or deed to secure debt on the Mortgaged Property of a right to declare all amounts due under that debt instrument immediately due and payable;

(k) the occurrence of a Bankruptcy Event;

(l) any Event of Default (as defined in any of the Subordinate Collateral Loan Documents), which continues beyond the expiration of any applicable cure period;

(m) any breach of, or event of default under, any other document or agreement relating to the Loan or the provision of low income housing tax credits to the Mortgaged Property to which Borrower is a party, which continues beyond the expiration of any applicable cure period thereunder;

(n) any amendment, modification, waiver or termination of any of the provisions of Borrower’s Organizational Documents without the prior written consent of Lender, other than (i) modifications necessary to reflect the occurrence of a Permitted Transfer or (ii) modifications that do not: (A) impose any additional or greater obligations on Borrower or any of the partners, managers or members of Borrower, (B) reduce or relieve Borrower or any of the partners, managers or members of Borrower of any of their obligations, (C) modify the timing, amounts, number, conditions or other terms of the installments or other payment obligations of the partners or members of Borrower or (D) impair the collateral for the Loan; provided, however, that Borrower shall promptly provide to Lender a copy of any modifications to Borrower’s Organizational Documents that do not require Lender’s consent;

(o) (i) any breach of any Material Property Agreement by Borrower or its officers, directors, employees, agents or tenants on behalf of Borrower that continues beyond any applicable notice and cure period; or (ii) any failure by Borrower to deliver concurrently (in case of notices given) or promptly (in case of notices received) copies of any and all notices received or given thereby to Lender with respect to any Material Property Agreement;

(p) if Borrower is a trust, the termination or revocation of any such trust; unless the trust is terminated as a result of the death of an individual trustor, in which
event Lender must be notified and such Borrower must be replaced with an individual or entity acceptable to Lender, in accordance with the provisions of Section 21(c) hereof, within 90 days of such death (provided however that no property inspection shall be required and a 1% transfer fee will not be charged); or

23. REMEDIES CUMULATIVE. Each right and remedy provided in this Instrument is distinct from all other rights or remedies under this Instrument or any other Subordinate Collateral Loan Document or afforded by applicable law, and each shall be cumulative and may be exercised concurrently, independently, or successively, in any order.

24. FORBEARANCE.

(a) Lender may (but shall not be obligated to) agree with Borrower, from time to time, and without giving notice to, or obtaining the consent of, or having any effect upon the obligations of, any third party obligor, to take any of the following actions: extend the time for payment of all or any part of the Indebtedness; reduce the payments due under this Instrument, the Subordinate Collateral Note, or any other Subordinate Collateral Loan Document; release anyone liable for the payment of any amounts under this Instrument, the Subordinate Collateral Note, or any other Subordinate Collateral Loan Document; accept a renewal of the Subordinate Collateral Note; modify the terms and time of payment of the Indebtedness; join in any extension or subordination agreement; release any Mortgaged Property; take or release other or additional security; modify the rate of interest or period of amortization of the Subordinate Collateral Note or change the amount of the monthly installments payable under the Subordinate Collateral Note; and otherwise modify this Instrument, the Subordinate Collateral Note, or any other Subordinate Collateral Loan Document.

(b) Any forbearance by Lender in exercising any right or remedy under the Subordinate Collateral Note, this Instrument, or any other Subordinate Collateral Loan Document or otherwise afforded by applicable law, shall not be a waiver of or preclude the exercise of any other right or remedy, or the subsequent exercise of any right or remedy. The acceptance by Lender of payment of all or any part of the Indebtedness after the due date of such payment, or in an amount which is less than the required payment, shall not be a waiver of Lender’s right to require prompt payment when due of all other payments on account of the Indebtedness or to exercise any remedies for any failure to make prompt payment. Enforcement by Lender of any security for the Indebtedness shall not constitute an election by Lender of remedies so as to preclude the exercise of any other right available to Lender. Lender’s receipt of any awards or proceeds under Sections 19 and 20 shall not operate to cure or waive any Event of Default.

25. WAIVER OF STATUTE OF LIMITATIONS. BORROWER HEREBY WAIVES THE RIGHT TO ASSERT ANY STATUTE OF LIMITATIONS AS A BAR TO THE ENFORCEMENT OF THE LIEN OF THIS INSTRUMENT OR TO ANY ACTION BROUGHT TO ENFORCE ANY SUBORDINATE COLLATERAL LOAN DOCUMENT.
26. **WAIVER OF MARSHALLING.** Notwithstanding the existence of any other security interests in the Mortgaged Property held by Lender or by any other party, Lender shall have the right to determine the order in which any or all of the Mortgaged Property shall be subjected to the remedies provided in this Instrument, the Subordinate Collateral Note, any other Subordinate Collateral Loan Document or applicable law. Lender shall have the right to determine the order in which any or all portions of the Indebtedness are satisfied from the proceeds realized upon the exercise of such remedies. Borrower and any party who now or in the future acquires a security interest in the Mortgaged Property and who has actual or constructive notice of this Instrument waives any and all right to require the marshalling of assets or to require that any of the Mortgaged Property be sold in the inverse order of alienation or that any of the Mortgaged Property be sold in parcels or as an entirety in connection with the exercise of any of the remedies permitted by applicable law or provided in this Instrument.

27. **FURTHER ASSURANCES.** Borrower shall execute, acknowledge, and deliver, at its sole cost and expense, all further acts, deeds, conveyances, assignments, estoppel certificates, financing statements or amendments, transfers and assurances as Lender may require from time to time in order to better assure, grant, and convey to Lender the rights intended to be granted, now or in the future, to Lender under this Instrument and the Subordinate Collateral Loan Documents. In furtherance thereof, on the request of Lender, Borrower shall re-execute or ratify any of the Subordinate Collateral Loan Documents or execute any other documents or take such other actions as may be necessary to effect the assignment, pledge or other transfer of the Loan to any party that may purchase, insure, credit enhance or otherwise finance all or any part of the Loan, including, without limitation, any Credit Enhancer (including Freddie Mac or Fannie Mae), the U.S. Department of Housing and Urban Development, or any insurance company, conduit lender or any other lender or investor.

28. **ESTOPPEL CERTIFICATE.** Within 10 days after a request from Lender, Borrower shall deliver to Lender a written statement, signed and acknowledged by Borrower, certifying to Lender or any person designated by Lender, as of the date of such statement, (i) that the Subordinate Collateral Loan Documents are unmodified and in full force and effect (or, if there have been modifications, that the Subordinate Collateral Loan Documents are in full force and effect as modified and setting forth such modifications); (ii) the unpaid principal balance of the Subordinate Collateral Note; (iii) the date to which interest under the Subordinate Collateral Note has been paid; (iv) that Borrower is not in default in paying the Indebtedness or in performing or observing any of the covenants or agreements contained in this Instrument or any of the other Subordinate Collateral Loan Documents (or, if Borrower is in default, describing such default in reasonable detail); (v) whether or not there are then existing any setoffs or defenses known to Borrower against the enforcement of any right or remedy of Lender under the Subordinate Collateral Loan Documents; and (vi) any additional facts requested by Lender.

29. **GOVERNING LAW; CONSENT TO JURISDICTION AND VENUE.**

   (a) This Instrument, and any Subordinate Collateral Loan Document which does not itself expressly identify the law that is to apply to it, shall be governed by the laws of the Property Jurisdiction.
(b) Borrower agrees that any controversy arising under or in relation to the Subordinate Collateral Note, this Instrument, or any other Subordinate Collateral Loan Document may be litigated in the Property Jurisdiction. The state and federal courts and authorities with jurisdiction in the Property Jurisdiction shall have jurisdiction over all controversies that shall arise under or in relation to the Subordinate Collateral Note, any security for the Indebtedness, or any other Subordinate Collateral Loan Document. Borrower irrevocably consents to service, jurisdiction, and venue of such courts for any such litigation and waives any other venue to which it might be entitled by virtue of domicile, habitual residence or otherwise. However, nothing in this Section 29 is intended to limit Lender’s right to bring any suit, action or proceeding relating to matters under this Instrument in any court of any other jurisdiction.

30. NOTICE.

(a) All notices, demands and other communications required or permitted to be given by Lender to Borrower pursuant to this Instrument shall be in writing, addressed as set forth below, and shall include a reference to “Citi Deal ID # 23831.” Each notice shall be deemed given on the earliest to occur of (a) the date when the notice is received by the addressee; (b) the first Business Day after the notice is delivered to a recognized overnight courier service, with arrangements made for payment of charges for next Business Day delivery; or (c) the third Business Day after the notice is deposited in the United States mail with postage prepaid, certified mail, return receipt requested.

To Borrower: Reserve at Engel Road, LLC
9349 WaterStone Blvd.
Cincinnati, Ohio 45249
Attn: Michael Riechman and Elizabeth A. Mangan, Esq.

With a copy to:

Dinsmore & Shohl LLP
One S. Main Street, #1300
Dayton, Ohio 45402
Attention: Fred Caspar

and a copy to:

Locke Lord LLP
600 Congress Avenue, #2200
Austin, Texas 78701
Attention: Rick Morrow

If to Lender: New Braunfels Industrial Development Corporation
424 South Castell Avenue
New Braunfels, Texas 78130

And a copy to: RBC Tax Credit Equity, LLC
600 Superior Avenue, Suite 2300
Cleveland, Ohio 44114
Attention: President and General Counsel

And a copy to:
Kutak Rock
1650 Farnam Street
Omaha, Nebraska 68102
Attention: Robert Coon

With a copy to:
Attn: James P. Plummer
Norton Rose Fulbright US LLP
300 Convent Street, Suite 2100
San Antonio, Texas 78205-3792

And to:
Citibank, N.A.
390 Greenwich Street, 2nd Floor
New York, New York 10013
Attention: Account Specialist
Deal ID #: 23831
Facsimile: (212) 723-8209

Citibank, N.A.
325 East Hillcrest Drive, Suite 160
Thousand Oaks, California 91360
Attention: Operations Manager/Asset Manager
Deal ID #: 23831
Facsimile: (805) 557-0924

Prior to the Conversion Date:
Citibank, N.A.
390 Greenwich Street, 2nd Floor
New York, New York 10013
Attention: Account Specialist
Deal ID #: 23831
Facsimile: (212) 723-8209

Following the Conversion Date:
Citibank, N.A.
c/o Berkadia Commercial Servicing Department
323 Norristown Road, Suite 300
Amber, PA 19002
Attention: Client Relations Manager
Deal ID #: 23831
Facsimile: (215) 328-0305

And a copy of any notices of default sent:
Citibank, N.A.
to:

388 Greenwich Street
New York, New York 10013
Attention: General Counsel’s Office
Deal ID No. 23831
Facsimile: (646) 291-5754

Any party may change such party’s address for the notice or demands required under this Instrument by providing written notice of such change of address to the other parties by written notice as provided herein.

(b) Any notice under the Subordinate Collateral Note and any other Subordinate Collateral Loan Document that does not specify how notices are to be given shall be given in accordance with this Section 30.

31. **CHANGE IN SERVICER.** If there is a change of the Servicer, Borrower will be given notice of the change.

32. **SINGLE ASSET BORROWER.** Until the Indebtedness is paid in full, Borrower (a) shall not acquire any real or personal property other than the Mortgaged Property and personal property related to the operation and maintenance of the Mortgaged Property; (b) shall not operate any business other than the management and operation of the Mortgaged Property; and (c) shall not maintain its assets in a way difficult to segregate and identify.

33. **SUCCESSORS AND ASSIGNS BOUND.** This Instrument shall bind, and the rights granted by this Instrument shall inure to, the successors and assigns of Lender and the permitted successors and assigns of Borrower.

34. **JOINT AND SEVERAL LIABILITY.** If more than one person or entity signs this Instrument as Borrower, the obligations of such persons and entities shall be joint and several.

35. **RELATIONSHIP OF PARTIES; NO THIRD PARTY BENEFICIARY.**

(a) The relationship between Lender and Borrower shall be solely that of creditor and debtor, respectively, and nothing contained in this Instrument shall create any other relationship between Lender and Borrower.

(b) No creditor of any party to this Instrument and no other person (other than a holder of the Subordinate Collateral Note and Servicer) shall be a third party beneficiary of this Instrument or any other Subordinate Collateral Loan Document. Without limiting the generality of the preceding sentence, (i) any arrangement (a “Servicing Arrangement”) between Lender and any Servicer for loss sharing or interim advancement of funds shall constitute a contractual obligation of such Servicer that is independent of the obligation of Borrower for the payment of the Indebtedness, (ii) Borrower shall not be a third party beneficiary of any Servicing Arrangement, and (iii) no payment by Servicer under any Servicing Arrangement will reduce the amount of the Indebtedness.
36. **SEVERABILITY; AMENDMENTS.** The invalidity or unenforceability of any provision of this Instrument shall not affect the validity or enforceability of any other provision, and all other provisions shall remain in full force and effect. This Instrument contains the entire agreement among the parties as to the rights granted and the obligations assumed in this Instrument. This Instrument may not be amended or modified except by a writing signed by the party against whom enforcement is sought; provided, however, that in the event of a Transfer (other than a Permitted Transfer), any or some or all of the Modifications to Instrument set forth in Exhibit B (if any) may be modified or rendered void by Lender at Lender’s option by notice to Borrower or such transferee.

37. **CONSTRUCTION.** The captions and headings of the sections of this Instrument are for convenience only and shall be disregarded in construing this Instrument. Any reference in this Instrument to an “Exhibit” or a “Section” shall, unless otherwise explicitly provided, be construed as referring, respectively, to an Exhibit attached to this Instrument or to a Section of this Instrument. All Exhibits attached to or referred to in this Instrument are incorporated by reference into this Instrument. Any reference in this Instrument to a statute or regulation shall be construed as referring to that statute or regulation as amended from time to time. Use of the singular in this Instrument includes the plural and use of the plural includes the singular. As used in this Instrument, the term “including” means “including, but not limited to.”

38. **SERVICER.**

(a) Borrower further acknowledges that Lender may from time to time and in accordance with the terms of the Subordinate Collateral Loan Agreement, appoint a Servicer or a replacement servicer to collect payments, escrows and deposits, to give and receive notices under the Subordinate Collateral Note, this Instrument, or the other Subordinate Collateral Loan Documents, and to otherwise service the Loan. Borrower hereby acknowledges and agrees that, unless Borrower receives written notice from Lender to the contrary, any action or right which shall or may be taken or exercised by Lender may be taken or exercised by Servicer with the same force and effect, including, without limitation, the collection of payments, the giving of notice, the holding of escrows, inspection of the Mortgaged Property, inspections of books and records, the request for documents or information, and the granting of consents and approvals. Borrower further agrees that, unless Lender instructs Borrower to the contrary in writing, (i) any notices, books or records, or other documents or information to be delivered under this Instrument, the Subordinate Collateral Note, or any other Subordinate Collateral Loan Document shall also be simultaneously delivered to the Servicer at the address provided for notices to Servicer pursuant to Section 30 hereof, (ii) any payments to be made under the Subordinate Collateral Note or for escrows under Section 7 of this Instrument or under any of the other Subordinate Collateral Loan Documents shall be made to Servicer. In the event Borrower receives conflicting notices regarding the identity of the Servicer or any other subject, any such notice from Lender shall govern.

(b) Borrower further acknowledges and agrees that, for the purpose of determining whether a security interest is created or perfected under the Uniform Commercial Code of the Property Jurisdiction, any escrows or other funds held by
Servicer pursuant to the Subordinate Collateral Loan Documents shall be deemed to be held by Lender.

39. DISCLOSURE OF INFORMATION. Lender may furnish information regarding Borrower or the Mortgaged Property to third parties with an existing or prospective interest in the servicing, enforcement, evaluation, performance, purchase or securitization of the Indebtedness, including but not limited to trustees, master servicers, special servicers, rating agencies, and organizations maintaining databases on the underwriting and performance of multifamily mortgage loans. Without limiting the generality of the foregoing, without notice to or the consent of Borrower, Lender may disclose to any title insurance company which insures any interest of Lender under this Instrument (whether as primary insurer, coinsurer or reinsurer) any information, data or material in its possession relating to Borrower, the Loan, the Improvements or the Mortgaged Property. Borrower irrevocably waives any and all rights it may have under applicable law to prohibit such disclosure, including but not limited to any right of privacy.

40. NO CHANGE IN FACTS OR CIRCUMSTANCES. Borrower warrants that all information in Borrower’s application for the Loan and in all financial statements, rent rolls, reports, certificates and other documents submitted in connection with Borrower’s application for the Loan are complete and accurate in all material respects. There has been no material adverse change in any fact or circumstance that would make any such information incomplete or inaccurate.

41. SUBROGATION. If, and to the extent that, the proceeds of the Loan are used to pay, satisfy or discharge any obligation of Borrower for the payment of money that is secured by a pre-existing mortgage, deed of trust or other lien encumbering the Mortgaged Property (a “Prior Lien”), such loan proceeds shall be deemed to have been advanced by Lender at Borrower’s request, and Lender shall automatically, and without further action on its part, be subrogated to the rights, including lien priority, of the owner or holder of the obligation secured by the Prior Lien, whether or not the Prior Lien is released.

42. FINANCING STATEMENT. As provided in Section 2, this Instrument constitutes a financing statement with respect to any part of the Mortgaged Property which is or may become a Fixture and for the purposes of such financing statement: (a) the Debtor shall be Borrower and the Secured Party shall be Lender; (b) the addresses of Borrower as Debtor and of Lender as Secured Party are as specified above in the first paragraph of this Instrument; (c) the name of the record owner is Borrower; (d) the types or items of collateral consist of any part of the Mortgaged Property which is or may become a Fixture; and (e) the organizational identification number of Borrower (if any) as Debtor is set forth on Exhibit C.

43. RESERVED.

44. ATTACHED EXHIBITS. The following Exhibits are attached to this Instrument and are incorporated by reference herein as if more fully set forth in the text hereof:

- Exhibit A Description of the Land.
- Exhibit B Modifications to Instrument.
Exhibit C Financing Statement Information.

The terms of this Instrument are modified and supplemented as set forth in said Exhibits. To the extent of any conflict or inconsistency between the terms of said Exhibits and the text of this Instrument, the terms of said Exhibits shall be controlling in all respects.

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45. WAIVER OF TRIAL BY JURY.

TO THE FULLEST EXTENT PERMITTED BY LAW, BORROWER AND LENDER EACH (A) COVENANTS AND AGREES NOT TO ELECT A TRIAL BY JURY WITH RESPECT TO ANY ISSUE ARISING OUT OF THIS INSTRUMENT OR THE RELATIONSHIP BETWEEN THE PARTIES AS BORROWER AND LENDER THAT IS TRIABLE OF RIGHT BY A JURY AND (B) WAIVES ANY RIGHT TO TRIAL BY JURY WITH RESPECT TO SUCH ISSUE TO THE EXTENT THAT ANY SUCH RIGHT EXISTS NOW OR IN THE FUTURE. THIS WAIVER OF RIGHT TO TRIAL BY JURY IS SEPARATELY GIVEN BY EACH PARTY, KNOWINGLY AND VOLUNTARILY WITH THE BENEFIT OF COMPETENT LEGAL COUNSEL.

IN WITNESS WHEREOF, the undersigned has duly executed and delivered this Instrument or caused this Instrument to be duly executed and delivered by its authorized representative as of the date first set forth above. The undersigned intends that this instrument shall be deemed to be signed and delivered as a sealed instrument.
BORROWER:

RESERVE AT ENGEL ROAD, LLC
a Texas limited liability company

By: MV Reserve at Engel Road LLC
   an Ohio limited liability company
   Its: Managing Member

   By: MV Affordable Housing LLC
      an Ohio limited liability company
      Its: Sole Member

   By: __________________________
      Print Name: Elizabeth A. Mangan
      Title: Authorized Signer

STATE OF ________________ §
§
COUNTY OF ________________ §
§

BEFORE ME, the undersigned authority, on this day personally appeared Elizabeth A. Mangan, Authorized Signer of MV Affordable Housing LLC, an Ohio limited liability company, on behalf of said limited liability company, sole member of MV Reserve at Engel Road LLC, an Ohio limited liability company, managing member of RESERVE AT ENGEL ROAD, LLC, a Texas limited liability company.

GIVEN UNDER MY HAND AND SEAL OF OFFICE on this the ___ day of __________, 2016.

Notary Public, State of __________________________
EXHIBIT A

DESCRIPTION OF THE LAND
EXHIBIT B

MODIFICATIONS TO INSTRUMENT

The following modifications are made to the text of the Instrument that precedes this Exhibit:

1. Section 3(a) is deleted in its entirety and replaced with the following:

   a. As part of the consideration for the Indebtedness, Borrower grants a security interest to Lender in the Rents, in accordance with the Texas Assignment of Rents Act (codified as Chapter 64 of the Texas Property Code). Notwithstanding any other provision hereof or in any of the Loan Documents to the contrary, all provisions related to the assignment of rents are subject to the terms, provisions, and conditions of the Texas Assignment of Rents Act ("TARA"), as codified in Tex. Prop. Code, Chapter 64, as the same may be amended, modified or supplemented from time to time. To the extent that specific terms and requirements of this Instrument or any other Loan Document, including the Loan Agreement, conflict with the specific terms and requirements of TARA, (i) to the extent such terms and requirements of TARA may be superseded by an agreement between the parties, the specific terms and requirements of this Instrument or the other Loan Documents hereby supersede such specific terms and requirements of TARA; and (ii) to the extent that such terms and requirements of TARA cannot be superseded by an agreement between the parties, the specific terms and requirements of TARA shall control, and the parties further agree that all other terms and requirements of this Instrument or the other Loan Documents shall not otherwise be impaired or superseded thereby and shall remain in full force and effect. This Instrument is intended to be a Security Instrument for purposes of TARA and the Indebtedness shall be a secured obligation for purposes of TARA. Promptly upon request by Lender, Borrower agrees to execute and deliver such further assignments as Lender may from time to time reasonably require. Borrower and Lender intend this assignment and grant of a security interest of Rents to be an assignment for security of the Indebtedness. Rents shall be deemed to be a part of the "Mortgaged Property". It is the intention of the Borrower that this Instrument create and perfect a lien on Rents in favor of Lender, which lien shall be effective as of the date of this Instrument.

2. Section 21(a) of the Instrument is amended by adding the following at the end of such Section:

   “(xii) notwithstanding anything to the contrary herein or in Borrower’s Organizational Documents, a Transfer or pledge of an interest in Borrower or any partner or member of Borrower to a 501(c)(3) nonprofit corporation, or a limited liability company whose sole member is a 501(c)(3) nonprofit corporation, without the prior written consent of Lender following full review and underwriting by Lender of the proposed transferee.”
3. Section 21(b) of the Instrument is amended by adding the following at the end of such Section:

“(viii) Provided that (i) Borrower owns the Mortgaged Property and remains the borrower under the Note, (ii) MV Reserve at Engel Road, LLC, a Texas limited liability company (“Managing Member”) is the managing member of Borrower and (iii) RBC Tax Credit Equity, LLC, an Illinois limited liability company, or its permitted transferee (the “Equity Investor”), has not less than a 99% membership interest in Borrower:

(A) the removal by Equity Investor of Managing Member as managing member of Borrower and its replacement as managing member by Equity Investor (“Equity Investor Sponsor”), or by a wholly-owned affiliate of Equity Investor Sponsor and/or the Equity Investor, which removal shall be in accordance with the terms of the amended and restated operating agreement of Borrower, provided that (i) the entity replacing the removed Managing Member must be a single purpose entity, and (ii) after such replacement, Equity Investor Sponsor, the Equity Investor or the Initial Owners of Equity Investor Sponsor must own not less than 51% of the managing membership interests, as applicable, in the entity which replaced the removed Managing Member; or

(B) For the sole purpose of effecting the initial sale of membership interests to a purchaser of low income housing tax credits allocated to the Mortgaged Property in either a one or two-step transaction: (i) a Transfer of membership interests of Equity Investor in Borrower to (A) a wholly-owned affiliate of Equity Investor or a wholly-owned affiliate of Equity Investor Sponsor, or (B) an entity whose management is controlled by Equity Investor, by a wholly-owned affiliate of Equity Investor or by Equity Investor Sponsor, or (ii) so long as Equity Investor Sponsor remains the sole managing member, sole manager or sole general partner, as applicable, of Equity Investor, the transfer of non-managing membership interests or limited partnership interests, as applicable, in Equity Investor.

“(ix) A Transfer of non-managing membership interests in the Managing Member held by a member of the Managing Member, to (A) non-minor immediate family members; or (B) trusts established for the benefit of the transferor and/or immediate family members; provided, however, that (1) such Transfer of ownership interests will not cause a change in the management and control of Managing Member, and after which Transfer, the managing member of Managing Member shall maintain the same right and ability to manage and control Borrower and Managing Member as existed prior to the Transfer and (2) Lender shall be provided with
advance written notice of all such Transfers permitted under this Section 21(b)(ix) no later than 5 days before the date of the Transfer.

Borrower must provide Lender with: (i) advance written notice of the identity of any entity replacing the Managing Member or a Guarantor pursuant to this Section 21(b), and (ii) upon request by Lender from time to time, the names of all owners of interests in Borrower, whether such interests are owned directly or indirectly.”

4. Section 30(a) of the Instrument is amended to add the following at the end of such Paragraph:

“Lender agrees that, so long as Equity Investor has a continuing ownership interest in Borrower, effective notice to Borrower under the Subordinate Collateral Loan Documents or the Loan Documents shall require delivery of a copy of such notice to Equity Investor. Such notice shall be given in the manner provided in this Section 30(a), at Equity Investor’s address set forth below:

RBC Tax Credit Equity, LLC
4720 Piedmont Row Drive, Suite 240
Charlotte, North Carolina 28210

with a copy to:

Kutak Rock LLP
The Omaha Building
1650 Farnam Street
Omaha, Nebraska 68102
Attention: Robert Coon

Lender agrees that, notwithstanding its rights to invoke the remedies permitted by Section 43 of the Instrument, upon the breach of any covenant or agreement by Borrower in the Instrument (including, but not limited to, the covenants to pay when due sums secured by the Instrument) or any other Subordinate Collateral Loan Documents or the Loan Documents, Lender shall not, so long as Equity Investor has a continuing ownership interest in Borrower, conduct a foreclosure sale of the Mortgaged Property or receive a deed-in-lieu of foreclosure, until such time as Equity Investor has first been given 30 days written notice of such default (or such longer time given to Borrower pursuant to the terms of the Subordinate Collateral Loan Documents or Loan Documents) and has failed, within such 30-day period to cure such default; provided, however, that Lender shall be entitled, during such 30-day period, to continue to accelerate the Note and to pursue its remedies.”

5. Section 43 is deleted in its entirety and replaced with the following:

43. ACCELERATION; REMEDIES.

Except as otherwise expressly provided in the Loan Documents, at any time during the existence and continuance of an Event of Default, Lender, at Lender's option, may declare the
Indebtedness to be immediately due and payable without further demand, and may invoke the power of sale and any other remedies permitted by Texas law or provided in this Instrument or in any other Loan Document. Borrower acknowledges that the power of sale granted in this Instrument may be exercised by Lender without prior judicial hearing. Lender shall be entitled to collect all reasonable costs and expenses incurred in pursuing such remedies, including reasonable attorneys' fees, costs of documentary evidence, abstracts and title reports.

If Lender invokes the power of sale, Lender may, by and through the Trustee, or otherwise, sell or offer for sale the Mortgaged Property in such portions, order and parcels as Lender may determine, with or without having first taken possession of the Mortgaged Property, to the highest bidder for cash at public auction. Such sale shall be made at the designated place in the county in which all or any part of the Land to be sold is situated (whether the parts or parcel, if any, situated in different counties are contiguous or not, and without the necessity of having any Personalty present at such sale) on the first Tuesday of any month between the hours of 10:00 a.m. and 4:00 p.m., after advertising the time, place and terms of sale and that portion of the Mortgaged Property to be sold by posting or causing to be posted written or printed notice of sale at least twenty-one (21) days before the date of the sale at the designated place in the county in which the sale is to be made and at the designated place in any other county in which a portion of the Land may be situated, and by filing such notice with the County Clerk(s) of the county(s) in which all or a portion of the Land may be situated, which notice may be posted and filed by the Trustee acting, or by any person acting for the Trustee, and Lender has, at least twenty-one (21) days before the date of the sale, served written or printed notice of the proposed sale by certified mail on each debtor obligated to pay the Indebtedness according to Lender's records by the deposit of such notice, enclosed in a postpaid wrapper, properly addressed to such debtor at debtor's most recent address as shown by Lender's records, in a post office or official depository under the care and custody of the United States Postal Service. The affidavit of any person having knowledge of the facts to the effect that such service was completed shall be prima facie evidence of the fact of service.

Trustee shall deliver to the purchaser at the sale, within a reasonable time after the sale, a deed conveying the Mortgaged Property so sold in fee simple with covenants of general warranty. Borrower covenants and agrees to defend generally the purchaser's title to the Mortgaged Property against all claims and demands. The recitals in Trustee's deed shall be prima facie evidence of the truth of the statements contained in those recitals. Trustee shall apply the proceeds of the sale in the following order: (a) to all reasonable costs and expenses of the sale, including reasonable Trustee's fees not to exceed 5% of the gross sale price (unless higher fees are customary in the jurisdiction where the Mortgaged Property is located) and attorneys' fees and costs of title evidence; (b) to the Indebtedness in such order as Lender, in Lender's discretion, directs; and (c) the excess, if any, to the person or persons legally entitled to the excess.

If all or any part of the Mortgaged Property is sold pursuant to this Section 43, Borrower will be divested of any and all interest and claim to the Mortgaged Property, including any interest or claim to all insurance policies, utility deposits, bonds, loan commitments and other intangible property included as a part of the Mortgaged Property. Additionally, after a sale of all or any part of the Land, Improvements, Fixtures and Personalty, Borrower will be considered a tenant at sufferance of the purchaser of the same, and the purchaser shall be entitled to immediate possession of such property. If Borrower shall fail to vacate the Mortgaged Property immediately, the purchaser may and shall have the right, without further notice to Borrower, to go into any justice court in any precinct or county in which the Mortgaged Property is located and file an action in
forcible entry and detainer, which action shall lie against Borrower or its assigns or legal representatives, as a tenant at sufferance. This remedy is cumulative of any and all remedies the purchaser may have under this Instrument or otherwise.

In any action for a deficiency after a foreclosure under this Instrument occurring prior to the Conversion Date, if any person against whom recovery is sought requests the court in which the action is pending to determine the fair market value of the Mortgaged Property, as of the date of the foreclosure sale, the following shall be the basis of the court's determination of fair market value:

(a) the Mortgaged Property shall be valued "as is" and in its condition as of the date of foreclosure, and no assumption of increased value because of post-foreclosure repairs, refurbishment, restorations or improvements shall be made;

(b) any adverse effect on the marketability of title because of the foreclosure or because of any other title condition not existing as of the date of this Instrument shall be considered;

(c) the valuation of the Mortgaged Property shall be based upon an assumption that the foreclosure purchaser desires a prompt resale of the Mortgaged Property for cash within a six month-period after foreclosure;

(d) although the Mortgaged Property may be disposed of more quickly by the foreclosure purchaser, the gross valuation of the Mortgaged Property as of the date of foreclosure shall be discounted for a hypothetical reasonable holding period (not to exceed six months) at a monthly rate equal to the average monthly interest rate on the Note for the twelve months before the date of foreclosure;

(e) the gross valuation of the Mortgaged Property as of the date of foreclosure shall be further discounted and reduced by reasonable estimated costs of disposition, including brokerage commissions, title policy premiums, environmental assessment and clean-up costs, tax and assessment, prorations, costs to comply with legal requirements and attorneys' fees;

(f) expert opinion testimony shall be considered only from a licensed appraiser certified by the State of Texas and, to the extent permitted under Texas law, a member of the Appraisal Institute, having at least five years' experience in appraising property similar to the Mortgaged Property in the county where the Mortgaged Property is located, and who has conducted and prepared a complete written appraisal of the Mortgaged Property taking into considerations the factors set forth in this Instrument; no expert opinion testimony shall be considered without such written appraisal;

(g) evidence of comparable sales shall be considered only if also included in the expert opinion testimony and written appraisal referred to in the preceding paragraph; and

(h) an affidavit executed by Lender to the effect that the foreclosure bid accepted by Trustee was equal to or greater than the value of the Mortgaged Property determined by Lender based upon the factors and methods set forth in
subparagraphs (a) through (g) above before the foreclosure shall constitute prima
facie evidence that the foreclosure bid was equal to or greater than the fair market
value of the Mortgaged Property on the foreclosure date.

Lender may, at Lender's option, comply with these provisions in the manner permitted or
required by Title 5, Section 51.002 of the Texas Property Code (relating to the sale of real estate)
or by Chapter 9 of the Texas Business and Commerce Code (relating to the sale of collateral
after default by a debtor), as those titles and chapters now exist or may be amended or succeeded
in the future, or by any other present or future articles or enactments relating to same subject.
Unless expressly excluded, the Mortgaged Property shall include Rents collected before a
foreclosure sale, but attributable to the period following the foreclosure sale, and Borrower shall
pay such Rents to the purchaser at such sale. At any such sale:

(a) whether made under the power contained in this Instrument, Section 51.002, the
Texas Business and Commerce Code, any other legal requirement or by virtue of
any judicial proceedings or any other legal right, remedy or recourse, it shall not
be necessary for Trustee to have physically present, or to have constructive
possession of, the Mortgaged Property (Borrower shall deliver to Trustee any
portion of the Mortgaged Property not actually or constructively possessed by
Trustee immediately upon demand by Trustee) and the title to and right of
possession of any such property shall pass to the purchaser as completely as if the
property had been actually present and delivered to the purchaser at the sale;

(b) each instrument of conveyance executed by Trustee shall contain a general
warranty of title, binding upon Borrower;

(c) the recitals contained in any instrument of conveyance made by Trustee shall
conclusively establish the truth and accuracy of the matters recited in the
Instrument, including nonpayment of the Indebtedness and the advertisement and
conduct of the sale in the manner provided in this Instrument and otherwise by
law and the appointment of any successor Trustee;

(d) all prerequisites to the validity of the sale shall be conclusively presumed to have
been satisfied;

(e) the receipt of Trustee or of such other party or officer making the sale shall be
sufficient to discharge to the purchaser or purchasers for such purchaser(s)'
purchase money, and no such purchaser or purchasers, or such purchaser(s)'
assigns or personal representatives, shall thereafter be obligated to see to the
application of such purchase money or be in any way answerable for any loss,
misapplication or nonapplication of such purchase money;

(f) to the fullest extent permitted by law, Borrower shall be completely and
irrevocably divested of all of Borrower's right, title, interest, claim and demand
whatsoever, either at law or in equity, in and to the property sold, and such sale
shall be a perpetual bar to any claim to all or any part of the property sold, both at
law and in equity, against Borrower and against any person claiming by, through
or under Borrower; and
to the extent and under such circumstances as are permitted by law, Lender may be a purchaser at any such sale.

7. The following new Sections are added to the Instrument after the last numbered Section:

46. **RECOERCSE LIABILITY.** So long as Equity Investor has a continuing ownership interest in Borrower, the provisions of Section 9 of the Subordinate Collateral Note, as they relate to Events of Default described in Section 9(d) of the Subordinate Collateral Note, shall be operative only after Equity Investor has been given thirty (30) days notice of the applicable Event(s) of Default described in Section 9(d) of the Subordinate Collateral Note, together with an opportunity within such thirty (30) day period to remedy the applicable Event(s) of Default. In all events, Lender shall be entitled during such thirty (30) day period to exercise all of its rights and remedies under this Instrument upon the occurrence of such Event of Default other than foreclosure of the Mortgaged Property. Notwithstanding anything to the contrary contained in any Loan Document, in no event shall Equity Investor have any personal liability to Lender under the Senior Loan or the Loan.

47. **SENIOR LOAN.** All of the rights of Lender and obligations of Borrower are subject and subordinate to the obligations of Borrower to, and rights of, Senior Lender under the Senior Loan.

48. **EXTENDED LOW-INCOME HOUSING COMMITMENT.** Lender agrees that the lien of this Instrument shall be subordinate to any extended low-income housing commitment (as such term is defined in Section 42(h)(6)(B) of the Internal Revenue Code) (the “Extended Use Agreement”) recorded against the Mortgaged Property; provided that such Extended Use Agreement, by its terms, must terminate upon foreclosure under this Instrument or upon a transfer of the Mortgaged Property by instrument in lieu of foreclosure, in accordance with Section 42(h)(6)(E) of the Internal Revenue Code.

49. **ANNUAL LIHTC REPORTING REQUIREMENTS.** Borrower must submit to Lender each year at the time of annual submission of Borrower’s financial analysis of operations, a copy of the following sections of Borrower’s federal tax return: Internal Revenue Forms 1065, 8586, 8609 and Form 8609, Schedule A, which must reflect the total low-income housing tax credits (“LIHTCs”) allocated to the Mortgaged Property and the LIHTCs claimed for the Mortgaged Property in the preceding year.

50. **CROSS-DEFAULT.** Borrower acknowledges and agrees that (a) any failure by Borrower or the Project to qualify for low income housing tax credits pursuant to the provisions of Section 42 of the Internal Revenue Code and (b) any default, event of default, or breach (however such terms may be defined) after the expiration of any applicable notice and/or cure periods under the Extended Use Agreement shall be an Event of Default under this Instrument and that any costs, damages or other amounts, including reasonable attorney’s fees incurred by Lender as a result of such an Event of Default by Borrower, including amounts paid to cure any default or event of default, under the Extended Use Agreement shall be an obligation of Borrower and become a part of the Indebtedness secured by this Instrument.
51. **ANNUAL COMPLIANCE.** Borrower shall submit to Lender on an annual basis, evidence that the Mortgaged Property is in ongoing compliance with all income, occupancy and rent restrictions under the Extended Use Agreement relating to the Mortgaged Property. Such submissions shall be made contemporaneously with Borrower’s reports required to be made to the regulator under the Extended Use Agreement.

52. **REGULATORY AGREEMENT.** Concurrently herewith Borrower and Lender are executing that certain Regulatory and Use Agreement (“Subordinate Regulatory Agreement”) which is being recorded against the Mortgaged Property. The Subordinate Regulatory Agreement is incorporated into and made a part of this Instrument and a default under such Subordinate Regulatory Agreement shall constitute an Event of Default under this Instrument and in such event Lender may exercise all of its rights and remedies under this Instrument.

53. **TRUSTEE.**

(a) Trustee may resign by giving of notice of such resignation in writing to Lender. If Trustee shall die, resign or become disqualified from acting under this Instrument or shall fail or refuse to act in accordance with this Instrument when requested by Lender or if for any reason and without cause Lender shall prefer to appoint a substitute trustee to act instead of the original Trustee named in this Instrument or any prior successor or substitute trustee, Lender shall have full power to appoint a substitute trustee to act instead of the original Trustee named in this Instrument. Such appointment may be executed by an authorized officer, agent or attorney-in-fact of Lender (whether acting pursuant to a power of attorney or otherwise), and such appointment shall be conclusively presumed to be executed with authority and shall be valid and sufficient without proof of any action by Lender.

(b) Any successor Trustee appointed pursuant to this Section shall, without any further act, deed or conveyance, become vested with all the estates, properties, rights, powers and trusts of the predecessor Trustee with like effect as if originally named as Trustee in this Instrument; but, nevertheless, upon the written request of Lender or such successor Trustee, the Trustee ceasing to act shall execute and deliver an instrument transferring to such successor Trustee, all the estates, properties, rights, powers and trusts of the Trustee so ceasing to act, and shall duly assign, transfer and deliver any of the property and monies held by the Trustee ceasing to act to the successor Trustee.

Trustee may authorize one or more parties to act on Trustee's behalf to perform the ministerial functions required of Trustee under this Instrument, including the transmittal and posting of any notices.

54. **ADDITIONAL PROVISIONS REGARDING ASSIGNMENT OF RENTS.**

In no event shall the assignment of Rents or Leases in Section 3 and Section 4 cause the Indebtedness to be reduced by an amount greater than the Rents actually received by Lender and
applied by Lender to the Indebtedness, whether before, during or after (i) an Event of Default, or (ii) a suspension or revocation of the license granted to Borrower in Section 3(b) with regard to the Rents. Borrower and Lender specifically intend that the assignment of Rents and Leases in Section 3 and Section 4 is not intended to result in a pro tanto reduction of the Indebtedness. The assignment of Rents and Leases in Section 3 and Section 4 is not intended to constitute a payment of, or with respect to, the Indebtedness and, therefore, Borrower and Lender specifically intend that the Indebtedness shall not be reduced by the value of the Rents and Leases assigned. Such reduction shall occur only if, and to the extent that, Lender actually receives Rents pursuant to Section 3 and applies such Rents to the Indebtedness. Borrower agrees that the value of the license granted with regard to the Rents equals the value of the absolute assignment of Rents to Lender. The assignment of Rents contained in Section 3 and Section 4 shall automatically terminate upon the release of this Instrument.

56. LOAN CHARGES.

Borrower and Lender intend at all times to comply with the laws of the State of Texas governing the maximum rate or amount of interest payable on or in connection with the Indebtedness (or applicable United States federal law to the extent that it permits Lender to contract for, charge, take, reserve or receive a greater amount of interest than under Texas law). If the applicable law is ever judicially interpreted so as to render usurious any amount payable under the Subordinate Collateral Note, this Instrument or any other Subordinate Collateral Loan Document, or contracted for, charged, taken, reserved or received with respect to the Indebtedness, or if acceleration of the maturity of the Indebtedness, or if any prepayment by Borrower results in Borrower having paid any interest in excess of that permitted by any applicable law, then Borrower and Lender expressly intend that all excess amounts collected by Lender shall be applied to reduce the unpaid principal balance of the Indebtedness (or, if the Indebtedness has been or would thereby be paid in full, shall be refunded to Borrower), and the provisions of the Subordinate Collateral Note, this Instrument and the other Subordinate Collateral Loan Documents immediately shall be deemed reformed and the amounts thereafter collectible under the Subordinate Collateral Loan Documents reduced, without the necessity of the execution of any new documents, so as to comply with any applicable law, but so as to permit the recovery of the fullest amount otherwise payable under the Loan Documents. The right to accelerate the maturity of the Indebtedness does not include the right to accelerate any interest which has not otherwise accrued on the date of such acceleration, and Lender does not intend to collect any unearned interest in the event of acceleration. All sums paid or agreed to be paid to Lender for the use, forbearance or detention of the Indebtedness shall, to the extent permitted by applicable law, be amortized, prorated, allocated and spread throughout the full term of the Indebtedness until payment in full so that the rate or amount of interest on account of the Indebtedness does not exceed the applicable usury ceiling. Notwithstanding any provision contained in the Note, this Instrument or any other Subordinate Collateral Loan Document that permits the compounding of interest, including any provision by which any accrued interest is added to the principal amount of the Indebtedness, the total amount of interest that Borrower is obligated to pay and Lender is entitled to receive with respect to the Indebtedness shall not exceed the amount calculated on a simple (i.e., noncompounded) interest basis at the maximum rate on principal amounts actually advanced to or for the account of Borrower, including all current and prior advances and any advances made pursuant to the Instrument or any other Loan Document (such as for the payment of Impositions and similar expenses or costs).
57. ENTIRE AGREEMENT.

THIS INSTRUMENT, THE SUBORDINATE COLLATERAL NOTE AND THE OTHER SUBORDINATE COLLATERAL LOAN DOCUMENTS REPRESENT THE FINAL AGREEMENT BETWEEN THE PARTIES AND CANNOT BE CONTRADICTED BY EVIDENCE OF PRIOR, CONTEMPORANEOUS OR SUBSEQUENT ORAL AGREEMENTS. THERE ARE NO UNWRITTEN ORAL AGREEMENTS BETWEEN THE PARTIES.

58. INDEMNIFICATION OF TRUSTEE.

EXCEPT FOR GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, TRUSTEE SHALL NOT BE LIABLE FOR ANY ACT OR OMISSION OR ERROR OF JUDGMENT. TRUSTEE MAY RELY ON ANY DOCUMENT BELIEVED BY HIM IN GOOD FAITH TO BE GENUINE. ALL MONEY RECEIVED BY TRUSTEE SHALL, UNTIL USED OR APPLIED AS HEREFIN PROVIDED, BE HELD IN TRUST, BUT NEED NOT BE SEGREGATED (EXCEPT TO THE EXTENT REQUIRED BY LAW), AND TRUSTEE SHALL NOT BE LIABLE FOR INTEREST THEREON. BORROWER HEREBY INDEMNIFIES TRUSTEE AGAINST ALL OUT-OF-POCKET LIABILITY TO A THIRD PARTY AND REASONABLE EXPENSES THAT HE MAY INCUR IN THE PERFORMANCE OF HIS DUTIES HEREUNDER, EXCEPT TO THE EXTENT THE SAME RESULTS FROM TRUSTEE’S GROSS NEGLIGENCE OR WILLFUL MISCONDUCT.

59. MISCELLANEOUS

(a) Final Maturity of Indebtedness. The final maturity of the Indebtedness shall be the maturity date as stated in the Subordinate Collateral Note.

All capitalized terms used in this Exhibit not specifically defined herein shall have the meanings set forth in the text of the Instrument that precedes this Exhibit.

BORROWER’S INITIALS: ______
**EXHIBIT C**

**FINANCING STATEMENT INFORMATION**

1. **Name and Address of Debtor:** Reserve at Engel Road, LLC  
   9349 WaterStone Blvd., Suite 200  
   Cincinnati, Ohio 45249  
   Attention: Michael Riechman and Elizabeth A. Mangan, Esq.

2. **Debtor’s State of Organization and Organizational I.D.#:** __________________

3. **State of Formation:** Texas  
   **Type of Entity:** Limited Liability Company  
   **Organizational I.D.#:** __________________

4. **Name and Address of Secured Party:** New Braunfels Industrial Development Corporation  
   Lender Address For Notices

5. **The Collateral is:** Fixtures (as that term is described in the Uniform Commercial Code of Property State attached to the Land described in Exhibit A attached to this Instrument.)
COLLATERAL ASSIGNMENT OF LOAN
(the "Collateral Assignment")

THE STATE OF TEXAS §

COUNTY OF COMAL §

KNOW ALL MEN BY THESE PRESENTS:

THAT NEW BRAUNFELS INDUSTRIAL DEVELOPMENT CORPORATION, a nonprofit corporation created under the Texas Development Corporation Act ("Assignor"), has ENDORSED, TRANSFERRED, ASSIGNED, SOLD, SET OVER, CONVEYED, and DELIVERED, and by these presents does hereby ENDORSE, TRANSFER, ASSIGN, SELL, SET OVER, CONVEY and DELIVER unto CITIBANK, N.A., a national banking association ("Lender"), and Assignor hereby grants and assigns a security interest in, all right, title and interest of Assignor in and to (a) that certain Multifamily Permanent Subordinate Note (Project Owner Subordinate Note) dated March __, 2016, in the face amount of $833,000.00 and listed on Exhibit "A" attached hereto (collectively, with all renewals, increases, modifications, replacements, rearrangements, substitutions, restatements, and extensions now or hereafter executed in connection therewith, the "Collateral Note", whether one or more), (b) the Loan Agreement of even date herewith between Assignor and Lender (the "Collateral Loan Agreement") and all other documents and instruments securing or otherwise pertaining to the Collateral Note (collectively, the "Collateral Loan Documents"), listed on Exhibit "A" attached hereto, and (c) all of the liens and security interests granted in the Collateral Loan Documents or otherwise securing the Collateral Note (collectively, the "Collateral Liens"); and Assignor hereby BARGAINS, SELLS, TRANSFERS, ASSIGNS, SETS OVER, CONVEYS and DELIVERS unto Lender all of the rights, privileges, securities, equities, powers, benefits, claims, priorities, demands, titles, or interests now owned or held by Assignor in and to the Collateral Note, the Collateral Loan Documents, and the Collateral Liens.

TO HAVE AND TO HOLD the Collateral Note, the Collateral Loan Documents, and Collateral Liens, together with all and singular the rights, titles, interests, privileges, securities, equities, powers, benefits, claims, priorities, and demands thereunto in anywise belonging unto Lender, its successors and assigns forever.

This Collateral Assignment is made to secure payment and performance of Assignor's obligations under and pursuant to (i) that certain Citi Note dated as of March __, 2016, in the face amount of $833,000.00, executed by Assignor to the order of Lender (collectively with all renewals, increases, modifications, replacements, rearrangements, substitutions, restatements, and extensions now or hereafter executed in connection therewith, the "Note"), and (ii) all documents and instruments now or hereafter securing or pertaining to the Note (collectively with the Note and all amendments, modifications, and restatements now or hereafter executed in connection therewith, the "Loan Documents").

Assignor represents and warrants to Lender that (A) Assignor is the sole legal and equitable owner and holder of the Collateral Note and the indebtedness evidenced thereby, (B) Assignor has not assigned, mortgaged, or hypothecated the Collateral Note, any indebtedness
evidenced thereby, or any of the Collateral Liens to any party other than Lender, (C) to Assignor's current actual knowledge, the Collateral Note is in all respects current and in good standing and is not overdue or subject to any credits or offsets, (D) to Assignor's current actual knowledge, no maker of the Collateral Note, nor any surety or guarantor of the Collateral Note, has raised any counterclaim, defense, allowance, adjustments, dispute, objection, or complaint regarding their respective liability on the Collateral Note or under any Collateral Loan Document, (E) the Collateral Note and the Collateral Loan Documents have not been amended, altered, or modified since the date of the execution thereof, (F) to Assignor's current actual knowledge, no default, or event which with notice, lapse of time, or both would constitute a default, under any of the Collateral Note or the Collateral Loan Documents has occurred, and (G) Assignor has the full right and authority to sell, assign, pledge, and grant a security interest in and to each of the Collateral Note, and the liens and security interests securing same.

During the continuance of an Event of Default (as such term is defined in the Loan Documents and such meaning is used herein), Lender shall, in addition to the rights and remedies provided for in the Note and the other Loan Documents, have the right to sell the Collateral Note in any manner afforded to Lender under the laws of the State of Texas. The proceeds of the sale shall be applied first to the reasonable expenses of the sale and then toward the payment of interest, principal, and attorneys' fees due and unpaid upon the Note, rendering the balance, if any, and surplus, if any, to Assignor; but if there be any deficiency, Borrower shall remain liable therefor. Lender shall have the right to purchase (by credit against the Obligations) at any public sale in which it is the highest bidder.

Lender shall have all the rights and remedies of a secured party under the Uniform Commercial Code as from time to time in effect in the State of Texas (the "UCC"), and Lender shall be entitled to avail itself of all such other rights and remedies as may now or hereafter exist at law or in equity for the collection of the indebtedness evidenced by the Note. The foreclosure of the security interest created hereby and the resort to any remedy provided hereunder or provided by the UCC or any other law of the State of Texas shall not prevent the concurrent employment of any other appropriate remedy or remedies.

The requirement of notice to Assignor of the time and place of any public sale of the Collateral Note, or of the time after which any private sale or any other intended disposition thereof is to be made, shall be met if such notice is mailed, postage prepaid, to Assignor at 9349 WaterStone Blvd., Suite 200, Cincinnati, Ohio 45249, or such other address provided to Lender by Assignor in writing, at least five days before the date of any public sale or at least five days before the time after which any private sale or disposition is to be made, unless a longer period of time is required pursuant to the UCC, in which case, applicable provisions of the UCC shall control.

The security interest created herein shall not be affected by or affect any other security taken for the Note, and any extensions may be made for the payment of the Note, without affecting the priority of such security interest or the validity thereof with reference to any third party, and the holder or holders of the Note shall not be limited by election of remedies if the holder or holders choose to foreclose the security interest created hereby by suit. The right
to sell the Collateral Note under the terms hereof shall also exist cumulative with such suit, and one method of foreclosure shall not bar the other, but both may be exercised at the same or different times, nor shall one be a defense to the other.

Assignor authorizes Lender, at the option of Lender, to give notice to the maker of the Collateral Note of the existence of this Collateral Assignment and to instruct such maker, whether or not a default has occurred under the Note, any document securing the Note, or under this Collateral Assignment, to direct all payments due and payable under the Collateral Note to Lender.

Assignor authorizes Lender, at the option of Lender, to collect and receive any and all sums becoming due upon the Collateral Note, such sums to be held by Lender without liability for interest thereon and applied towards the payment of the Note. Except as otherwise expressly provided herein, Lender shall hold and have the full control of the Collateral Note until the Note is fully paid, including without limitation, the right to foreclose any or all Collateral Liens, without the necessity of consent by Assignor (and without the necessity of the prior foreclosure of the Collateral Note), and to release the Collateral Liens upon the full and final payment of such Collateral Note to Lender. Notwithstanding the foregoing, Lender is under no obligation to make or enforce the collection of the Collateral Note, and the failure of Lender from any cause to make or enforce the collection thereof shall not in any way prejudice the right of Lender to thereafter make or enforce collection thereof or in any way affect the Note. Further, nothing in the Collateral Loan Agreement shall limit or impair the right of Lender to enforce or otherwise proceed with respect to the Collateral Note if Lender were to become the holder thereof.

Lender shall, once the Note has been paid in full to Lender, remit all proceeds, if any, received by it under the Collateral Note, if any, that remain after the Note has been paid in full, to Assignor.

This Collateral Assignment shall in no manner impair or affect any of the other liens granted by Assignor to Lender, and no security hereafter taken therefor shall in any manner impair or affect the security hereby given, it being agreed that all such present and future security shall be cumulative security and that Lender may foreclose under any of such security, as Lender may elect, without waiving the other.

Upon the occurrence and during the continuance of an Event of Default (until such Event of Default has been cured), in addition to the other rights of Lender hereunder, Lender may, but shall not be obligated to, renew, extend, or rearrange the time and manner of payment of any of the Collateral Note, in its own name or in the name of Assignor with or without the joinder or consent of Assignor, without incurring responsibility or liability to Assignor or discharging, impairing or otherwise affecting any liability or obligation of Assignor, including, without limitation, Assignor's liability for the payment of the Note.

In the event that Assignor hereafter becomes the owner of any of the property covered by the Collateral Loan Documents prior to the date that Lender executes a written
release of this Collateral Assignment, Lender shall automatically have a lien and security interest in and against such property to secure the payment of the Note, and Assignor does hereby grant Lender a lien and security interest in and against such property, and Assignor shall immediately, at Assignor's sole cost and expense, execute and deliver, and file in the appropriate public records with all filing fees paid, appropriate documents, in form and substance reasonably satisfactory to Lender, further evidencing the granting of such lien and security interest. The foregoing provisions shall not be deemed to constitute consent or authorization by Lender to the transfer, sale or other disposition of any of the property covered by the Collateral Loan Documents to or by Assignor.

Assignor shall pay to Lender all reasonable expenditures and expenses, including, without limitation, reasonable attorneys' fees, incurred by Lender in exercising, protecting or enforcing Lender's interests, rights, and remedies under this Collateral Assignment, plus interest thereon at the Default Rate, as defined in the Note. Assignor shall further do, make, procure, execute and deliver all acts, things, writings and assurances as Lender may at any time reasonably request to protect, assure or enforce Lender's interests, rights and remedies under this Collateral Assignment.

Notwithstanding anything to the contrary in any of the Loan Documents, neither Assignor, nor any of its sponsors, board members, and/or managers shall have any personal liability under the Loan Documents for the repayment of the Note or for the performance of any other obligations of Assignor. Lender's only recourse against Assignor for the satisfaction of the indebtedness evidenced by the Note and the performance of the obligations set forth under the Loan Documents shall be Lender's exercise of its rights and remedies with respect to this Collateral Assignment and any other collateral held by Assignor as security for the Collateral Note. This limitation on Assignor's liability shall not limit or impair Lender’s enforcement of its rights against any guarantor of the loan evidenced by the Note. The Assignor shall not be obligated to pay any fee, penalty, costs, or the principal and interest on the Note, except from the proceeds of payments it receives on the Collateral Note. Neither the full faith and credit, nor the taxing power of the Assignor or the City of New Braunfels, Texas is pledged or available for the payment of the principal, interest, or other costs associated with the Note or any other lien and security interest granted in connection with the Loan Documents. Notwithstanding any other provision of the Loan Documents or this Collateral Assignment, Assignor shall have no liability except from amounts received pursuant to the Collateral Note and this Collateral Assignment or any other lien and security interest granted in connection with the Collateral Note or otherwise securing the Collateral Note.
THIS COLLATERAL ASSIGNMENT CONSTITUTES THE ENTIRE AGREEMENT BETWEEN THE PARTIES HERETO WITH RESPECT TO THE SUBJECT HEREOF AND SHALL SUPERSEDE ANY PRIOR AGREEMENT BETWEEN THE PARTIES HERETO, WHETHER WRITTEN OR ORAL, RELATING TO THE SUBJECT HEREOF. FURTHERMORE, IN THIS REGARD, THIS AGREEMENT AND THE OTHER WRITTEN LOAN DOCUMENTS REPRESENT, COLLECTIVELY, THE FINAL AGREEMENT AMONG THE PARTIES THERETO AND MAY NOT BE CONTRADICTED BY EVIDENCE OF PRIOR, CONTEMPORANEOUS, OR SUBSEQUENT ORAL AGREEMENT OF SUCH PARTIES. THERE ARE NO UNWRITTEN ORAL AGREEMENTS BETWEEN THE PARTIES.

EXECUTED as of March __, 2016.

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NEW BRAUNFELS INDUSTRIAL DEVELOPMENT CORPORATION, a nonprofit corporation

By: ____________________________
Name: __________________________
Title: __________________________

THE STATE OF TEXAS §

COUNTY OF _________ §

This instrument was acknowledged before me on the ___ day of ________, 2016, by __________, __________ of NEW BRAUNFELS INDUSTRIAL DEVELOPMENT CORPORATION, a nonprofit corporation, on behalf of and as the act and deed of said corporation.

__________________________
Notary Public, State of Texas
AGREED TO AND ACCEPTED THIS
____ DAY OF ________________, 2016:

CITIBANK, N.A.

By: ______________________________
Name: ______________________________
Title: ______________________________

STATE OF FLORIDA  §
§
COUNTY OF PALM BEACH  §

This instrument was acknowledged before me on the _____ day of ___________, 2016, by ______________________, ___________________ of CITIBANK, N.A., a national banking association, on behalf of said banking association, ___________________ (check one) ☐ is personally known to me or ☐ has produced a valid driver’s license as identification.

Notary Public, State of ______________________
Name: ______________________________
My Commission Expires: __________________
My Commission Number is:______________
EXHIBIT "A"

1. Multifamily Permanent Subordinate Note dated on or about March __, 2016, in the face amount of $833,000.00, executed by Reserve at Engel Road, LLC to the order of New Braunfels Industrial Development Corporation.

2. Subordinate Multifamily Deed of Trust, Assignment of Rents, Security Agreement and Fixture Filing dated March __, 2016, from Reserve at Engel Road, LLC for the benefit of New Braunfels Industrial Development Corporation.

3. Agreement of Environmental Indemnification dated March __, 2016, from Reserve at Engel Road, LLC for the benefit of New Braunfels Industrial Development Corporation.

4. Loan Agreement dated March __, 2016, among Reserve at Engel Road, LLC, New Braunfels Industrial Development Corporation and Citibank, N.A.
INTERCREDITOR AND SUBORDINATION AGREEMENT

This Intercreditor and Subordination Agreement (this "Agreement") is entered into as of March __, 2016, by and among CITIBANK, N.A., a national banking association (the "Bank"), NEW BRAUNFELS INDUSTRIAL DEVELOPMENT CORPORATION, a nonprofit corporation created under the Texas Development Corporation Act ("IDC"), and RESERVE AT ENGEL ROAD, LLC, a Texas limited liability company (the "Borrower").

RECITALS:

A. The Borrower is the owner of a 96-unit affordable housing apartment project to be constructed in New Braunfels, Comal County, Texas on the property which is more particularly described on Exhibit "A" attached hereto and incorporated herein by reference (the "Project").

B. As provided for in the Loan Agreement of even date herewith, among IDC, Borrower, and Bank (the "IDC Loan Agreement"), IDC has committed to fund a loan of funds ("IDC Loan") to the Borrower for the Project, in the aggregate amount of $833,000.00 (such funding is referred to herein as the "IDC Funds").

C. Pursuant to a Construction Loan Agreement (the "Bank Loan Agreement") of even date herewith, the Bank has agreed to make a loan in an amount not to exceed $14,250,000.00 (the "Bank Loan") to provide permanent financing for the Project. The Bank Loan is evidenced by a promissory note in the amount of $14,250,000.00, and is more fully described in and secured by a Multifamily Deed of Trust, Assignment of Rents and Security Agreement and Fixture Filing, of even date with such promissory note, and covering the Project to be recorded in the Official Public Records of Real Property of Comal County, Texas.

D. IDC and the Bank wish to enter into this Agreement to fully set forth their agreement regarding the relationship of the IDC Loan to the Bank Loan and other matters of mutual interest to IDC and the Bank with respect to the construction of the Project.

NOW, THEREFORE, in consideration of the mutual covenants contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, IDC and the Bank hereby agree as follows:

1. Definitions. In addition to the defined terms set forth elsewhere herein, the following term shall have the meaning set forth below:

"IDC Loan Documents" means the IDC Loan Agreement, the promissory note evidencing the IDC Loan and the subordinate lien deed of trust covering the Project and securing the IDC Loan, and all other documents and agreements governing, pertaining to, and securing the IDC Loan.

2. Acknowledgments, Representations, and Consents. IDC represents to the Bank that (i) once issued, and assuming no changes in any material respect in applicable law, as it
exists on the date hereof, the IDC Loan Documents will be in full force and effect, and (ii) the IDC Loan Documents will constitute a commitment by IDC to make the IDC Loan Funds available to the Borrower for the Project as hereafter provided subject to the terms and conditions of the IDC Loan Documents.

3. **Subordination by IDC.** IDC agrees that to the extent any voluntary or involuntary liens, claims, and security interests, against the Project, whether by agreement, at law, or in equity, of IDC (or any other entity claiming by, through, or under IDC) now or hereafter secure the payment and/or performance of the Borrower's obligations under and with respect to the IDC Loan and the IDC Loan Documents (including, without limitation, the liens granted in any deed of trust against the Project, executed by the Borrower to IDC pursuant to the IDC Loan), the same are and shall forever remain junior, subordinate, and inferior, to the liens and security interests of the Bank against the Project, securing payment of the Bank Loan and, by its execution hereof, IDC hereby evidences said subordination. IDC has and does hereby subordinate its right to payment of the IDC Loan to the right of Bank to be paid on the Bank Loan; provided that until Borrower receives written notice from Bank of the occurrence of an Event of Default under and with respect to the Bank Loan, Borrower may make regularly scheduled payments (but not prepayments) on the IDC Loan (no payments shall be made or accepted on the IDC Loan after receipt of any such notice of default until written notice by Bank is received that that portion of default has been cured or waived).

4. **Cross Default.** (a) If a default or an event of default occurs under the IDC Loan Documents, that default or event of default shall constitute an Event of Default under the Bank Loan Agreement. If an Event of Default under the Bank Loan Agreement occurs, that Event of Default shall constitute a default or an event of default under the IDC Loan Documents.

(b) In the event of any receivership, insolvency, bankruptcy, assignment for the benefit of creditors, reorganization or arrangement with creditors, whether or not pursuant to bankruptcy laws, sale of all or substantially all of the assets, dissolutions, liquidations or any other marshaling of the assets and liabilities of the Borrower, IDC and the Bank agree that the Bank Loan will be paid prior to the IDC Loan. IDC agrees to file at the expense of the Borrower, any claim, or other instrument of similar character necessary to enforce the obligations of the Borrower under the IDC Loan Documents, and will hold in trust for the Bank and immediately pay over to the Bank, in the form received (except for IDC’s endorsement or assignment which IDC agrees to provide upon the Bank's request) to be applied on the Bank Loan, any and all moneys, dividends, or other assets received in any such proceeding on account of the IDC Loan, unless and until the Bank Loan shall be paid in full.

5. **Notices.** Any notice by one party to the others hereunder shall be in writing and shall be delivered in person, via overnight courier or by United States Mail, postage prepaid, certified, return receipt requested. Notice shall be deemed delivered on the date delivered, or if mailed, three business days after deposit in the U.S. Mail. All notices shall be delivered to the following addresses:
To Bank: Citibank, N.A.
390 Greenwich Street, 2nd Floor
New York, New York 10013
Attention: Account Specialist
Deal ID # 23831
Facsimile: (212) 723-8209

And to:

Citibank, N.A.
325 East Hillcrest Drive, Suite 160
Thousand Oaks, California 91360
Attention: Operations Manager/Asset Manager
Deal ID #: 23831
Facsimile: (805) 557-0924

Prior to the Conversion Date:

Citibank, N.A.
390 Greenwich Street, 2nd Floor
New York, New York 10013
Attention: Account Specialist
Deal ID # 23831
Facsimile: (212) 723-8209

Following the Conversion Date:

Citibank, N.A.
c/o Berkadia Commercial Servicing Department
323 Norristown Road, Suite 300
Amber, PA 19002
Attention: Client Relations Manager
Deal ID # 23831
Facsimile: (215) 328-0305

And a copy of any notices of default sent to:

Citibank, N.A.
388 Greenwich Street
New York, New York 10013
Attention: General Counsel’s Office
Deal ID No. 23831
Facsimile: (646) 291-5754

To Borrower: Reserve at Engel Road, LLC
9349 WaterStone Blvd., Suite 200
Cincinnati, Ohio 45249

With a copy to: Dinsmore & Shohl LLP
One S. Main Street, #1300
Dayton, Ohio 45402

HOU 408443679v4
And a copy to:  
Attention: Fred Caspar  
RBC Tax Credit Equity, LLC  
600 Superior Avenue, Suite 2300  
Cleveland, Ohio 44114  
Attention: President and General Counsel

And to:  
Kutak Rock  
1650 Farnam Street  
Omaha, Nebraska 68102  
Attention: Robert Coon 

Locke Lord LLP  
600 Congress Avenue, #2200  
Austin, Texas 78701  
Attention: Rick Morrow

To IDC:  
New Braunfels Industrial Development Corporation  
424 South Castell Avenue  
New Braunfels, Texas 78130

With a copy to:  
Norton Rose Fulbright US LLP  
300 Convent Street, Suite 2100  
San Antonio, Texas 78205-3792  
Attention: James P. Plummer

The parties may change their addresses for purposes of notice by giving the other parties ten (10) days' written notice of the address change in the manner hereinabove stated.

6. Miscellaneous.

(a) This Agreement constitutes the entire agreement of the three parties hereto with respect to the subject matter hereof, and all other prior and contemporaneous written or oral agreements. Any amendment hereto must be in writing executed by the Borrower, IDC, and the Bank.

(b) Time is of the essence in the performance of the parties' obligations hereunder.

(c) THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS AND APPLICABLE UNITED STATES FEDERAL LAW.

(d) This Agreement shall be enforceable by and binding upon all successors and assigns of the Bank.
(e) This Agreement shall remain in full force and effect until the Bank Loan has been fully and finally paid and the Borrower has no further obligations under the Bank Loan Agreement.

(f) This Agreement may be executed in two or more counterparts, and it shall not be necessary that any one counterpart be executed by all of the parties hereto. Each fully or partially executed counterpart shall be deemed an original, but all such counterparts taken together shall constitute but one and the same instrument.

(g) Capitalized terms used in this Agreement without definition shall have the meanings given to those terms in the Bank Loan Agreement.

(h) IDC and Borrower, that notwithstanding anything in the IDC Loan Documents to the contrary, the IDC shall be fully funded prior to the Conversion Date (as such term is defined in the Bank Loan Agreement) on terms and in a manner satisfactory to the Bank to pay budgeted items.

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IN WITNESS WHEREOF, the undersigned have affixed their signatures hereto on the respective dates set forth in the acknowledgment below to be effective as of the date first above written.

"BORROWER"

RESERVE AT ENGEL ROAD, LLC
a Texas limited liability company
By: MV Reserve at Engel Road LLC
an Ohio limited liability company
Its: Managing Member
By: MV Affordable Housing LLC
an Ohio limited liability company
Its: Sole Member
By: ____________________________
Print Name: Elizabeth A. Mangan
Title: Authorized Signer

STATE OF ________________ §
COUNTY OF ________________ §

BEFORE ME, the undersigned authority, on this day personally appeared Elizabeth A. Mangan, Authorized Signer of MV Affordable Housing LLC, an Ohio limited liability company, on behalf of said limited liability company, sole member of MV Reserve at Engel Road LLC, an Ohio limited liability company, managing member of RESERVE AT ENGEL ROAD, LLC, a Texas limited liability company.

GIVEN UNDER MY HAND AND SEAL OF OFFICE on this the ___ day of __________, 2016.

______________________________
Notary Public, State of _________________
"IDC"

NEW BRAUNFELS INDUSTRIAL DEVELOPMENT CORPORATION, a nonprofit corporation

By: __________________________________________
Name: _________________________________________
Title: __________________________________________

THE STATE OF TEXAS §

COUNTY OF ________ §

This instrument was acknowledged before me on this _____ day of ________, 2016, by
__________________________________________, _____________________ of NEW BRAUNFELS INDUSTRIAL
DEVELOPMENT CORPORATION, a nonprofit corporation, on behalf of said corporation.

__________________________________________
Notary Public, State of Texas
My Commission Expires: ______________
"BANK"

CITIBANK, N.A.,
a national banking association

By: ____________________________
Name: __________________________
Title: __________________________

THE STATE OF _______ §
COUNTY OF _________ §

This instrument was acknowledged before me on this _____ day of ______, 2016, by ________________________ of CITIBANK, N.A., a national banking association, on behalf of said banking association.

______________________________
NOTARY PUBLIC, State of __________

My Commission Expires: __________________________
EXHIBIT "A"

LEGAL DESCRIPTION
FINANCING STATEMENT

This Financing Statement is presented to a Filing Officer for filing pursuant to the Uniform Commercial Code.

1. The name and address of the debtor (“Debtor”) is:

NEW BRAUNFELS INDUSTRIAL DEVELOPMENT CORPORATION, a nonprofit corporation created under the Texas Development Corporation Act
424 South Castell Avenue
New Braunfels, Texas 78130

2. The name and address of secured party (“Secured Party”) is:

CITIBANK, N.A.,
a national banking association
390 Greenwich Street, 2nd Floor
New York, New York 10013

3. This Financing Statement covers the following collateral:

   (a) The Multifamily Permanent Subordinate Note listed on Schedule “A” attached hereto (the “Collateral Note”, whether one or more);

   (b) All documents and instruments securing or otherwise pertaining to the Collateral Note (collectively, the “Collateral Loan Documents”), including, without limitation, the instruments and agreements listed on Schedule “A”;

   (c) All of the liens and security interests granted in the Collateral Loan Documents or otherwise securing the Collateral Note (collectively, the “Collateral Liens”); and

   (d) All proceeds of any of the foregoing.
DEBTOR:

NEW BRAUNFELS INDUSTRIAL
DEVELOPMENT CORPORATION, a nonprofit
corporation

By: _______________________________
Name: ____________________________
Title: _____________________________
Schedule “A”

1. Multifamily Permanent Subordinate Note dated on or about March ____, 2016, in the face amount of $833,000.00, executed by Reserve at Engel Road, LLC to the order of New Braunfels Industrial Development Corporation.

2. Subordinate Multifamily Deed of Trust, Assignment of Rents, Security Agreement and Fixture Filing dated March ____, 2016, from Reserve at Engel Road, LLC for the benefit of New Braunfels Industrial Development Corporation.

3. Agreement of Environmental Indemnification dated March ____, 2016, from Reserve at Engel Road, LLC for the benefit of New Braunfels Industrial Development Corporation.

4. Loan Agreement dated March ____, 2016, among Reserve at Engel Road, LLC, New Braunfels Industrial Development Corporation and Citibank, N.A.
EXCEPTIONS TO NON-RECOURSE GUARANTY  
(Project Owner Subordinate Loan)

THIS EXCEPTIONS TO NON-RECOURSE GUARANTY (this “Guaranty”) is entered into as of the ___ day of March, 2016, by MV RESIDENTIAL CONSTRUCTION INC., an Ohio corporation, and MV RESIDENTIAL PROPERTY MANAGEMENT, INC., an Ohio corporation (collectively, “Guarantor”, whether one or more), for the benefit of Beneficiary Parties (as defined below). The date of this Guaranty as set forth above is for reference purposes only, and this Guaranty will not be effective and binding until the Closing Date (as defined by the Loan Agreement).

RECITALS:

A. Reserve at Engel Road, LLC, a Texas limited liability company (the “Borrower”) has applied to the New Braunfels Industrial Development Corporation (the “Lender”) for a loan (the “Project Owner Subordinate Loan”) for the acquisition, construction, rehabilitation, development, equipping and/or operation of a 96-unit multifamily residential project located in New Braunfels, Comal County, Texas, known or to be known as Reserve at Engel Road (the “Mortgaged Property”).

B. Simultaneously with the execution of this Guaranty and as a part of the same transaction, the Borrower has executed and delivered to the Lender the Multifamily Permanent Subordinate Note (the “Project Owner Subordinate Note”) in the maximum principal amount of $833,000.00, together with the other Project Owner Subordinate Loan Documents (each as hereinafter defined), which are intended to evidence and secure the Project Owner Subordinate Loan.

C. The Project Owner Subordinate Loan is secured by, among other things, that certain Multifamily Deed of Trust, Assignment of Rents, Security Agreement, and Fixture Filing (the “Project Owner Subordinate Security Instrument”), dated as of the date hereof, encumbering the property described on Exhibit A attached thereto, and incorporated by reference herein.

D. Lender has collaterally assigned the Project Owner Subordinate Loan to CitiBank, N.A. (“Citi”).

E. The Project Owner Subordinate Loan will be advanced to Borrower as provided for in that certain Subordinate Loan Agreement (“Loan Agreement”) dated as of the date hereof between Lender and Citi, and joined in by Borrower (the Project Owner Subordinate Note, the Project Owner Subordinate Security Instrument, the Loan Agreement and all other documents executed in connection with the Project Owner Subordinate Loan, including this Guaranty, are collectively referred to as the “Project Owner Subordinate Loan Documents”).

F. The term “Beneficiary Parties” as used herein shall mean Lender, any Servicer and their respective successors and assigns. The term “Beneficiary Parties” shall also include any lawful owner, holder or pledgee of the Project Owner Subordinate Note.
G. As a condition to the making of the Project Owner Subordinate Loan, Beneficiary Parties require that Guarantor execute this Guaranty.

H. Guarantor will directly or indirectly derive a material financial benefit from the making of the Project Owner Subordinate Loan.

NOW, THEREFORE, in order to induce Lender to make the Project Owner Subordinate Loan to Borrower, and in consideration thereof, Guarantor agrees as follows:

1. **Defined Terms.** Capitalized terms used but not defined in this Guaranty shall have the meanings assigned to them in the Project Owner Subordinate Security Instrument.

2. **Scope of Guaranty.** Guarantor represents to Beneficiary Parties that Guarantor has a direct or indirect ownership in Borrower and/or will otherwise derive a material financial benefit from the making of the Project Owner Subordinate Loan. Guarantor hereby does jointly, severally and unconditionally guaranty to Beneficiary Parties the full and prompt payment when due, whether at maturity or earlier, by reason of acceleration or otherwise, and at all times thereafter, and the full and prompt performance when due, of all of the following (collectively, the “Guaranteed Obligations”):

   (a) All amounts for which Borrower is personally liable under the Project Owner Subordinate Note, including, without limitation, all amounts under Section 9 of the Project Owner Subordinate Note.

   (b) The payment and performance of all of Borrower’s obligations under Section 18 of the Project Owner Subordinate Security Instrument (the “Environmental Provisions”) and under that certain Agreement of Environmental Indemnification dated as of the date hereof from Borrower for the benefit of Beneficiary Parties (the “Environmental Agreement”).

   (c) All costs and expenses, including out of pocket expenses and reasonable fees of attorneys and expert witnesses, incurred by Beneficiary Parties in enforcing their rights under this Guaranty.

For purposes of determining Guarantor’s liability under this Guaranty, all payments made by Borrower with respect to the Indebtedness and all amounts received by Beneficiary Parties from the enforcement of their rights under the Project Owner Subordinate Security Instrument or the other Project Owner Subordinate Loan Documents shall be applied first to the portion of the Indebtedness for which neither Borrower nor Guarantor has personal liability.

3. **Guarantor’s Obligations Survive Foreclosure.** The obligations of Guarantor under this Guaranty shall survive any foreclosure proceeding, any foreclosure sale, any delivery of any deed in lieu of foreclosure, and any release of record of the Project Owner Subordinate Security Instrument or the other Project Owner Subordinate Loan Documents, and, in addition, the obligations of Guarantor relating to Borrower’s obligations under Section 18 of the Project Owner Subordinate Security Instrument (Environmental Hazards) and under Section 6 of the Environmental Agreement shall survive any repayment or discharge of the Indebtedness.
4. **Guaranty of Payment and Performance.** Guarantor’s obligations under this Guaranty constitute an unconditional and continuing guaranty of payment and performance and not merely a guaranty of collection. Guarantor hereby irrevocably and unconditionally covenants and agrees that Guarantor is liable for the Guaranteed Obligations as a primary obligor. The Guaranteed Obligations and this Guaranty are separate, distinct and in addition to any liability and/or obligations that Borrower or Guarantor may have under any other guaranty or indemnity executed by Borrower or Guarantor in connection with the Project Owner Subordinate Loan, and no other agreement, guaranty or indemnity executed in connection with the Project Owner Subordinate Loan shall act to reduce or set off any of Guarantor’s liability hereunder.

5. **Unconditional Guaranty.** The obligations of Guarantor under this Guaranty shall be performed without demand by Beneficiary Parties and shall be unconditional irrespective of the genuineness, validity, regularity or enforceability, in whole or in part, of the Guaranteed Obligations, the Project Owner Subordinate Note, the Project Owner Subordinate Security Instrument or any other Project Owner Subordinate Loan Document, and without regard to any other circumstance which might otherwise constitute a legal or equitable discharge of a surety, a guarantor, a borrower or a mortgagor. Guarantor hereby waives the benefit of all principles or provisions of law, statutory or otherwise, which are or might be in conflict with the terms of this Guaranty and agrees that Guarantor’s obligations shall not be affected by any circumstances, whether or not referred to in this Guaranty, which might otherwise constitute a legal or equitable discharge of a surety, a guarantor, a borrower or a mortgagor. Guarantor hereby waives the benefits of all rights to require Beneficiary Parties to (a) proceed against Borrower or any other guarantor of Borrower’s payment or performance with respect to the Indebtedness (an “Other Guarantor”), (b) if Borrower or any Other Guarantor is a partnership, proceed against any general partner of Borrower or the Other Guarantor, (c) proceed against or exhaust any collateral held by Beneficiary Parties to secure the repayment of the Indebtedness, (d) pursue any other remedy it may now or hereafter have against Borrower, or, if Borrower is a partnership, any general partner of Borrower, or (e) record the Project Owner Subordinate Security Instrument or to file any financing statement or to otherwise enforce, perfect, protect, secure or insure any lien or security interest given as security in connection with the Security Documents. Guarantor further waives, to the fullest extent permitted by applicable law, (a) any right to revoke this Guaranty as to any future advances under the Project Owner Subordinate Security Instrument or the other Project Owner Subordinate Loan Documents, (b) any defenses that could arise with respect to an amendment or modification of the Guaranteed Obligations by operation of law, action of any
court or the amendment of any of the Project Owner Subordinate Loan Documents, (c) any defense that Beneficiary Parties have waived any Guaranteed Obligation by failing to enforce any right or remedy hereunder, or to promptly enforce any such right or remedy and (d) any other event or circumstance that may constitute a defense of Borrower or Guarantor to payment of the Guaranteed Obligations.

6. **Modification of Project Owner Subordinate Loan Documents.** At any time or from time to time and any number of times, without notice to Guarantor and without affecting the liability of Guarantor, (a) the time for payment of the principal of or interest on the Indebtedness may be extended or the Indebtedness may be renewed in whole or in part; (b) the time for Borrower’s performance of or compliance with any covenant or agreement contained in the Project Owner Subordinate Note, the Project Owner Subordinate Security Instrument or any other Project Owner Subordinate Loan Document, whether presently existing or hereinafter entered into, may be extended or such performance or compliance may be waived; (c) the maturity of the Indebtedness may be accelerated as provided in the Project Owner Subordinate Note, the Project Owner Subordinate Security Instrument, or any other Project Owner Subordinate Loan Document; (d) the Project Owner Subordinate Note, the Project Owner Subordinate Security Instrument, or any other Project Owner Subordinate Loan Document may be modified or amended by Beneficiary Parties and Borrower in any respect, including, but not limited to, an increase in the principal amount; and (e) any security for the Indebtedness may be modified, exchanged, surrendered or otherwise dealt with or additional security may be pledged or mortgaged for the Indebtedness.

7. **Joint and Several Liability.** If more than one person executes this Guaranty, the obligations of those persons under this Guaranty and any Other Guarantor shall be joint and several. Beneficiary Parties, in their sole and absolute discretion, may (a) bring suit against Guarantor, or any one or more of the persons constituting Guarantor, and any Other Guarantor, jointly and severally, or against any one or more of them; (b) compromise or settle with any one or more of the persons constituting Guarantor or any Other Guarantor for such consideration as Beneficiary Parties may deem proper; (c) release one or more of the persons constituting Guarantor, or any Other Guarantor, from liability; and/or (d) otherwise deal with Guarantor and any Other Guarantor, or any one or more of them, in any manner, and no such action shall impair the rights of Beneficiary Parties to collect from Guarantor any amount guaranteed by Guarantor under this Guaranty. Nothing contained in this paragraph shall in any way affect or impair the rights or obligations of Guarantor with respect to any Other Guarantor.

8. **Subordination of Borrower’s Indebtedness to Guarantor.** Any indebtedness of Borrower held by Guarantor now or in the future is and shall be subordinated to the Indebtedness of Borrower to Beneficiary Parties under the Project Owner Subordinate Loan Documents. After the occurrence and during the continuance of an Event of Default or the occurrence and during the continuance of an event which would, with the giving of notice or the passage of time, or both, constitute an Event of Default, Guarantor shall not receive or collect, directly or indirectly, from Borrower or any other party any amount of such indebtedness until the Guaranteed Obligations are paid in full. To the extent that Guarantor receives payment of any of the indebtedness of Borrower in violation of the preceding sentence, the same shall be collected, enforced and received by Guarantor, as trustee for Beneficiary Parties, but without
reducing or affecting in any manner the liability of Guarantor under the other provisions of this Guaranty.

9. **Waiver of Subrogation.** Guarantor agrees to withhold the exercise of any and all subrogation and reimbursement rights against Borrower, against any other person, and against any collateral or security for the Indebtedness and Guarantor shall have no right of, and hereby waives any claim for, subrogation or reimbursement against Borrower or any managing member or general partner of Borrower by reason of any payment by Guarantor under this Guaranty, whether such right or claim arises at law or in equity or under any contract or statute, until (a) the Indebtedness has been indefeasibly paid and satisfied in full, (b) all obligations owed to Beneficiary Parties have been fully performed, (c) there has expired the maximum possible period thereafter during which any payment made by Borrower to Beneficiary Parties with respect to the Indebtedness, could be deemed a preference under the United States Bankruptcy Code and (d) each of Beneficiary Parties has released, transferred or disposed of all its right, title and interest in such collateral or security.

10. **Preference.** If any payment by Borrower is held to constitute a preference under any applicable bankruptcy, insolvency, or similar laws, or if for any other reason any of Beneficiary Parties is required to refund any sums to Borrower, such refund shall not constitute a release of any liability of Guarantor under this Guaranty. It is the intention of Beneficiary Parties and Guarantor that Guarantor’s obligations under this Guaranty shall not be discharged except by Guarantor’s performance of such obligations and then only to the extent of such performance.

11. **Reinstatement.** If at any time any payment of any amounts due under the Project Owner Subordinate Loan Documents by Borrower, Guarantor or any other Person is rescinded or must be otherwise restored or returned upon the insolvency, bankruptcy or reorganization of Borrower or Guarantor or otherwise, Guarantor’s obligations hereunder with respect to such payment shall be reinstated as though such payment has been due but not made at such time.

12. **Guarantor’s Financial Condition.**

(a) Guarantor hereby represents and warrants to Beneficiary Parties that as of the date hereof and throughout the term of the Project Owner Subordinate Loan, and after giving effect to this Guaranty and the contingent obligation evidenced hereby, Guarantor is and will be solvent and has and will have (i) assets which, fairly valued, exceed its obligations, liabilities (including contingent liabilities) and debts, and (ii) property and assets sufficient to satisfy and repay its obligations and liabilities. Guarantor hereby covenants and agrees that during the term of the Project Owner Subordinate Loan, except for the payment of employee salaries and benefits and dividends in the ordinary course of business, it shall not sell, pledge, mortgage or otherwise transfer any of its assets, or any interest therein, on terms materially less favorable than would be obtained in an arms-length transaction for fair consideration.

(b) Guarantor hereby represents and warrants to Beneficiary Parties that all financial statements and other financial data previously delivered to Lender in connection with the application for the Project Owner Subordinate Loan and/or this Guaranty...
relating to the Guarantor are true, correct and complete in all material respects. Such financial statements fairly present the financial positions of all Persons who are the subjects thereof as of the respective dates thereof. Guarantor further represents and warrants to Beneficiary Parties that, except as previously disclosed to Lender in writing, no material adverse change has occurred as of the date hereof and no material change shall have occurred as of the date of each advance of the Project Owner Subordinate Loan, in such financial position, or in the business, operations, assets, management, ownership, condition (financial or otherwise) or prospects of Guarantor, since the respective dates of such financial statements and financial data. Except as otherwise previously disclosed to Lender in writing, Guarantor has no knowledge of any material contractual obligations of Guarantor which might have a material adverse effect upon the ability of Guarantor to perform Guarantor’s obligations under this Guaranty.

(c) Guarantor shall furnish or cause to be furnished to Lender: (i) within ten (10) days of Lender’s request, a copy of the most recent year’s federal tax return for such Guarantor, and (ii) as soon as available and in any event within one hundred twenty (120) days after the end of each fiscal year of Guarantor, copies of the following financial statements of Guarantor for such fiscal year, prepared, and audited by an independent certified public accountant acceptable to Lender, in accordance with generally accepted accounting principles: (A) a balance sheet as of the end of such fiscal year (including supporting schedules), and (B) a statement of income and capital accounts for such fiscal year.

(d) Guarantor shall from time to time, upon request by Lender, deliver to Lender such other financial statements as Lender may reasonably require.

13. Marital and Residency Status.

Each Guarantor represents and warrants that as of the date hereof (check one of the following statements):

☐ Guarantor is an unmarried individual.

☐ Guarantor is a married individual; neither Guarantor nor Guarantor’s spouse resides in a community property state (Arizona, California, Idaho, Louisiana, Nevada, New Mexico, Texas, Washington, Wisconsin and Puerto Rico).

☐ Guarantor is a married individual; Guarantor and/or Guarantor’s spouse resides in a community property state (Arizona, California, Idaho, Louisiana, Nevada, New Mexico, Texas, Washington, Wisconsin or Puerto Rico). Guarantor will deliver the executed Spousal Consent and Waiver from his or her spouse in the form attached hereto as Exhibit B on or before the Closing Date.

Each Guarantor agrees to notify Lender of any change in Guarantor’s marital or residency status specified above within ten (10) Business Days after such change of occurs and, if required by Lender, agrees to provide a Spousal Consent and Waiver in the form required by Lender.
14. **(RESERVED).**

15. **Determinations by Lender.** Except to the extent expressly set forth in this Guaranty to the contrary, in any instance where the consent or approval of Lender may be given or is required, or where any determination, judgment or decision is to be rendered by Lender under this Guaranty, the granting, withholding or denial of such consent or approval and the rendering of such determination, judgment or decision shall be made or exercised by Lender, as applicable (or its designated representative) at its sole and exclusive option and in its sole and absolute discretion.

16. **Governing Law.** This Guaranty shall be governed by and enforced in accordance with the laws of the Property Jurisdiction, without giving effect to the choice of law principles of the Property Jurisdiction that would require the application of the laws of a jurisdiction other than the Property Jurisdiction.

17. **Consent to Jurisdiction and Venue.** Guarantor agrees that any controversy arising under or in relation to this Guaranty shall be litigated exclusively in the Property Jurisdiction. The state and federal courts and authorities with jurisdiction in the Property Jurisdiction shall have exclusive jurisdiction over all controversies which shall arise under or in relation to this Guaranty. Guarantor irrevocably consents to service, jurisdiction, and venue of such courts for any such litigation and waives any other venue to which it might be entitled by virtue of domicile, habitual residence or otherwise. However, nothing herein is intended to limit Beneficiary Parties’ right to bring any suit, action or proceeding relating to matters arising under this Guaranty against Guarantor or any of Guarantor’s assets in any court of any other jurisdiction.

18. **Successors and Assigns.** This Guaranty shall be binding upon Guarantor and its heirs, legal representatives, successors, successors-in-interest and assigns, as appropriate, and shall inure to the benefit of the Beneficiary Parties and their respective successors, successors-in-interest and assigns. The terms used to designate any of the parties herein shall be deemed to include the heirs, legal representatives, successors, successors-in-interest and assigns, as appropriate, of such parties. References to a “person” or “persons” shall be deemed to include individuals and entities. Guarantor acknowledges and agrees that any Beneficiary Party, at its option, may assign its respective rights and interests under this Guaranty and the other Project Owner Subordinate Loan Documents in whole or in part and upon such assignment all the terms and provisions of this Guaranty or the other Project Owner Subordinate Loan Documents shall inure to the benefit of such assignee to the extent so assigned. Guarantor may not assign or delegate its rights, interests or obligations under this Guaranty without first obtaining Lender’s prior written consent.

19. **Severability.** The invalidity, illegality or unenforceability of any provision of this Guaranty shall not affect the validity, legality or enforceability of any other provision, and all other provisions shall remain in full force and effect.

20. **Expenses.** Guarantor shall pay to the Beneficiary Parties, upon demand, the amount of any and all expenses, including, without limitation, reasonable attorneys’ fees (including reasonable time charges of attorneys who may be employees of Beneficiary Parties), Exceptions to Non-Recourse Guaranty

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which the Beneficiary Parties may incur in connection with (a) the exercise or enforcement of any of their rights hereunder, (b) the failure by Guarantor to perform or observe any of the provisions hereof, or (c) the breach by Guarantor of any representation or warranty of Guarantor set forth herein. Guarantor shall also pay to the Beneficiary Party who incurs any such expenses, interest on such expenses computed at the Default Rate set forth in the Project Owner Subordinate Note from the date on which such expenses are incurred to the date of payment thereof.

21. **Remedies Cumulative.** In the event of Guarantor’s default under this Guaranty, the Beneficiary Parties may exercise all or any one or more of their rights and remedies available under this Guaranty, at law or in equity. Such rights and remedies shall be cumulative and concurrent, and may be enforced separately, successively or together, and the exercise of any particular right or remedy shall not in any way prevent the Beneficiary Parties from exercising any other right or remedy available to the Beneficiary Parties. The Beneficiary Parties may exercise any such remedies from time to time as often as may be deemed necessary by the Beneficiary Parties.

22. **No Agency or Partnership.** Nothing contained in this Guaranty shall constitute any Beneficiary Party as a joint venturer, partner or agent of Guarantor, or render any Beneficiary Party liable for any debts, obligations, acts, omissions, representations or contracts of Guarantor.

23. **Entire Agreement; Amendment and Waiver.** This Guaranty contains the complete and entire understanding of the parties with respect to the matters covered herein. Guarantor acknowledges that Guarantor has received copies of the Project Owner Subordinate Note, the Environmental Agreement and all other Project Owner Subordinate Loan Documents. This Guaranty may not be amended, modified or changed, nor shall any waiver of any provision hereof be effective, except by a written instrument signed by the party against whom enforcement of the waiver, amendment, change, or modification is sought, and then only to the extent set forth in that instrument. No specific waiver of any of the terms of this Guaranty shall be considered as a general waiver.

24. **Further Assurances.** Guarantor shall at any time and from time to time, promptly execute and deliver all further instruments and documents, and take all further action that may be reasonably necessary or desirable, or that any Beneficiary Party may reasonably request, in order to protect any right or interest granted by this Guaranty or to enable the Beneficiary Party to exercise and enforce its rights and remedies under this Guaranty.

25. **Notices; Change of Guarantor’s Address.** All notices given under this Guaranty shall be in writing and shall be sent to the respective addresses of the parties, in the manner set forth in the Project Owner Subordinate Security Instrument. Notices to Guarantor may be sent to the address of Borrower set forth in the Project Owner Subordinate Security Instrument. Guarantor agrees to notify Lender (in the manner for giving notices provided in the Project Owner Subordinate Security Instrument) of any change in Guarantor’s address within ten (10) Business Days after such change of address occurs.
26. **Counterparts.** To the extent Guarantor consists of more than one party, this Guaranty may be executed in multiple counterparts, each of which shall constitute an original document and all of which together shall constitute one agreement.

27. **Captions.** The captions of the sections of this Guaranty are for convenience only and shall be disregarded in construing this Guaranty.

28. **Servicer.** Guarantor hereby acknowledges and agrees that, pursuant to the terms of the Project Owner Subordinate Security Instrument: (a) from time to time, Lender may appoint a servicer to collect payments, escrows and deposits, to give and to receive notices under the Project Owner Subordinate Note, this Guaranty or the other Project Owner Subordinate Loan Documents, and to otherwise service the Project Owner Subordinate Loan and (b) unless Borrower receives written notice from Lender to the contrary, any action or right which shall or may be taken or exercised by Lender may be taken or exercised by such servicer with the same force and effect.

29. **Beneficiary Parties as Third Party Beneficiary.** Each of the Beneficiary Parties shall be a third party beneficiary of this Guaranty for all purposes.

30. **Waiver of Trial by Jury.** TO THE MAXIMUM EXTENT PERMITTED UNDER APPLICABLE LAW, EACH OF GUARANTOR AND THE BENEFICIARY PARTIES (A) COVENANTS AND AGREES NOT TO ELECT A TRIAL BY JURY WITH RESPECT TO ANY ISSUE ARISING OUT OF THIS GUARANTY OR THE RELATIONSHIP BETWEEN THE PARTIES THAT IS TRIABLE OF RIGHT BY A JURY AND (B) WAIVES ANY RIGHT TO TRIAL BY JURY WITH RESPECT TO SUCH ISSUE TO THE EXTENT THAT ANY SUCH RIGHT EXISTS NOW OR IN THE FUTURE. THIS WAIVER OF RIGHT TO TRIAL BY JURY IS SEPARATELY GIVEN BY EACH PARTY, KNOWINGLY AND VOLUNTARILY WITH THE BENEFIT OF COMPETENT LEGAL COUNSEL.

31. **Time of the Essence.** Time is of the essence with respect to this Guaranty.

32. **Modifications.** All modifications (if any) to the terms of this Guaranty (“Modifications”) are set forth on Exhibit A attached to this Guaranty. In the event of a Transfer under the terms of the Project Owner Subordinate Security Instrument, some or all of the Modifications to this Guaranty may be modified or rendered void by Lender at its option by notice to Guarantor.

33. **Attached Exhibits.** The following Exhibits are attached to this Guaranty and are incorporated by reference herein as if more fully set forth in the text hereof:

   **Exhibit A – Modifications to Exceptions to Non-Recourse Guaranty**
   **Exhibit B – [RESERVED]**

The terms of this Guaranty are modified and supplemented as set forth in said Exhibits. To the extent of any conflict or inconsistency between the terms of said Exhibits and the text of this Guaranty, the terms of said Exhibits shall be controlling in all respects.
IN WITNESS WHEREOF, the undersigned has duly executed and delivered this Exceptions to Non-Recourse Guaranty or caused this Exceptions to Non-Recourse Guaranty to be duly executed and delivered by its authorized representative as of the date first set forth above. The undersigned intends that this instrument shall be deemed to be signed and delivered as a sealed instrument.

GUARANTOR:

MV RESIDENTIAL CONSTRUCTION, INC.,
an Ohio corporation

By: __________________________
    Elizabeth A. Mangan, Authorized Signer

Address:

9349 WaterStone Blvd., #200
Cincinnati, Ohio 45249
THE STATE OF OHIO §
COUNTY OF WARREN §

This instrument was acknowledged before me on this ___ day of ______________, 2016, by Elizabeth A. Mangan, Authorized Signer of MV RESIDENTIAL CONSTRUCTION, INC., an Ohio corporation, on behalf of said corporation.

________________________________________
Notary Public, State of Ohio

THE STATE OF OHIO §
COUNTY OF WARREN §

This instrument was acknowledged before me on this ___ day of ______________, 2016, by Elizabeth A. Mangan, Authorized Signer of MV RESIDENTIAL PROPERTY MANAGEMENT, INC., an Ohio corporation, on behalf of said corporation.

________________________________________
Notary Public, State of Ohio

(acknowledgment follows on subsequent page)
EXHIBIT A

Modifications to Exceptions to Non-Recourse Guaranty

The following modifications are made to the text of the Guaranty that precedes this Exhibit:

1. The Guaranty is modified by adding a new Section 34 as follows:

34. Additional Guarantor Financial Representations and Covenants.

   (a) Guarantor hereby represents that Guarantor owns Liquid Assets in an amount of not less than $1,750,000.00. Guarantor agrees that Guarantor shall not encumber or dilute such Liquid Assets such that Guarantor shall at all times maintain Liquid Assets in an amount of not less than $1,750,000.00. Guarantor acknowledges and agrees that the failure to comply with the foregoing Liquidity Covenant shall constitute an Event of Default under the Loan.

   (b) Until all of the Indebtedness and all obligations under this Guaranty have been paid in full, Guarantor shall deliver to Lender, concurrently with the delivery of each quarterly or annual financial statement required to be delivered by Borrower under the Project Owner Subordinate Security Instrument, a certificate of Guarantor setting forth in reasonable detail Guarantor's Liquid Assets, based on such financial statement. Each such certificate shall be supported by Guarantor’s federal and state income tax returns and a balance sheet and statement of changes in Guarantor’s financial position, in each case certified by such Guarantor as complete and accurate. All such financial statements shall be in reasonable detail and prepared in accordance with consistently applied accounting methods reasonably acceptable to Lender.

   (c) As used in this Section 34, the following term shall have the meaning set forth below:

   “Liquid Assets” shall mean assets in the form of cash, cash equivalents, obligations of (or fully guaranteed as to principal and interest by) the United States or any agency or instrumentality thereof (provided the full faith and credit of the United States government supports such obligations or guarantee), certificates of deposit issued by a commercial bank having net assets of not less than $500 million, securities listed and traded on a recognized stock exchange or traded over the counter and listed in the National Association of Securities Dealers’ Automatic Quotations, or liquid debt instruments that have a readily ascertainable value and are regularly traded in a recognized financial market.

Capitalized terms used and not defined herein shall have the respective meanings ascribed to them in the Guaranty.
 AGREEMENT OF ENVIRONMENTAL INDEMNIFICATION

THIS AGREEMENT OF ENVIRONMENTAL INDEMNIFICATION (this “Agreement”) is entered into as of the ___ day of March, 2016, by RESERVE AT ENGEL ROAD, LLC, a Texas limited liability company (“Borrower”); and MV RESIDENTIAL CONSTRUCTION INC., an Ohio corporation, and MV RESIDENTIAL PROPERTY MANAGEMENT, INC., an Ohio corporation (collectively, “Guarantor”, whether one or more); and together with Borrower, collectively the “Indemnitor”, for the benefit of Beneficiary Parties (as defined herein). The date of this Agreement as set forth above is for reference purposes only, and this Agreement will not be effective and binding until the Closing Date (as defined by the Loan Agreement).

RECITALS:

A. The Borrower has applied to the New Braunfels Industrial Development Corporation (the “Lender”) for a loan (the “Project Owner Subordinate Loan”) in the amount of $833,000.00, for the acquisition, construction, rehabilitation, development, equipping and/or operation of a 96-unit multifamily residential project located in New Braunfels, Comal County, Texas, known or to be known as Reserve at Engel Road (the “Mortgaged Property”).

B. Simultaneously with the execution of this Agreement and as a part of the same transaction, the Borrower has executed and delivered to the Lender the Multifamily Permanent Subordinate Note (the “Project Owner Subordinate Note”) in the maximum principal amount of $833,000.00, together with the other Project Owner Subordinate Loan Documents (each as hereinafter defined), which are intended to evidence and secure the Project Owner Subordinate Loan.

C. The Project Owner Subordinate Loan is secured by, among other things, that certain Subordinate Multifamily Deed of Trust, Assignment of Rents, Security Agreement, and Fixture Filing (the “Subordinate Security Instrument”), dated as of the date hereof, encumbering the Mortgaged Property, and incorporated by reference herein, and will be advanced to Borrower pursuant to that certain Subordinate Loan Agreement (“Loan Agreement”) dated as of the date hereof between Lender, Citibank, N.A. (“Citi”), and Borrower (the Project Owner Subordinate Note, the Subordinate Security Instrument, the Loan Agreement and all other documents executed in connection with the Project Owner Subordinate Loan, including this Agreement, are collectively referred to as the “Project Owner Subordinate Loan Documents”).

D. The term “Beneficiary Parties” as used herein shall mean Lender, any Servicer and their respective successors and assigns. The term “Beneficiary Parties” shall also include any lawful owner, holder or pledgee of the Project Owner Subordinate Note.
E. Guarantor acknowledges that it will receive substantial economic and other benefits from the extension by Lender of the financing evidenced by the Project Owner Subordinate Note.

F. As a condition to the making of the Project Owner Subordinate Loan, each Indemnitor is required to enter into this Agreement.

NOW THEREFORE, in consideration for the making of the Project Owner Subordinate Loan, and in order to induce Beneficiary Parties to consummate said transactions, each Indemnitor agrees for the benefit of Beneficiary Parties as follows:

1. **Recitals.** The parties agree the recitals are true and correct, and are incorporated herein by reference.

2. **Certain Definitions.** Capitalized terms used but not defined in this Agreement shall have the meanings assigned to them in the Subordinate Security Instrument. The following terms, when used herein, shall have the following meanings:

   (a) “Hazardous Materials” means petroleum and petroleum products and compounds containing them, including gasoline, diesel fuel and oil; explosives; flammable materials; radioactive materials; polychlorinated biphenyls (“PCBs”) and compounds containing them; lead and lead-based paint; asbestos or asbestos-containing materials in any form that is or could become friable; underground or above-ground storage tanks, whether empty or containing any substance; radon; Mold; toxic or mycotoxin spores; any substance the presence of which on the Mortgaged Property is prohibited by any federal, state or local authority; any substance that requires special handling under any Hazardous Materials Law; and any other material or substance (whether or not naturally occurring) now or in the future that (i) is defined as a “hazardous substance,” “hazardous material,” “hazardous waste,” “toxic substance,” “toxic pollutant,” “solid waste,” “pesticide,” “contaminant,” or “pollutant” or otherwise classified as hazardous or toxic by or within the meaning of any Hazardous Materials Law, or (ii) is regulated in any way by or within the meaning of any Hazardous Materials Law.

   (b) “Hazardous Materials Law” means all federal, state, and local laws, ordinances and regulations and standards, rules, policies and other governmental requirements, rules of common law (including without limitation nuisance and trespass), consent order, administrative rulings and court judgments and decrees or other government directive in effect now or in the future and including all amendments, that relate to Hazardous Materials or to the protection or conservation of the environment or human health and apply to any Indemnitor or to the Mortgaged Property, including without limitation those relating to industrial hygiene, or the use, analysis, generation, manufacture, storage, discharge, release, disposal, transportation, treatment, investigation or remediation of Hazardous Materials. Hazardous Materials Laws include, but are not limited to, the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. Section 9601, et seq., the Resource Conservation and Recovery Act, 42 U.S.C. Section 6901, et seq., the Toxic Substance Control Act, 15 U.S.C. Section 2601, et seq.,
the Clean Water Act, 33 U.S.C. Section 1251, et seq., and the Hazardous Materials Transportation Act, 49 U.S.C. Section 5101, et seq., the Superfund Amendments and Reauthorization Act, the Solid Waste Disposal Act, the Clean Water Act, the Clean Air Act, the Toxic Substances Control Act, the Occupational Safety and Health Act, and their state analogs.

(c) “Indemnitees” for purposes of this Agreement, means collectively Beneficiary Parties and their successors, assigns, and transferees and the officers, directors, shareholders, partners, members, trustees, heirs, legal representatives, employees and agents of Beneficiary Parties and their successors, assigns and transferees.

(d) “Mold” means mold, fungus, microbial contamination or pathogenic organisms.

(e) “O&M Program” shall have the meaning set forth in Section 3(d) hereof.

3. **Prohibited Activities or Conditions.**

(a) Except for matters described in Section 3(b), no Indemnitor shall cause or permit any of the following:

(i) the presence, use, generation, release, treatment, processing, storage (including storage in above ground and underground storage tanks), handling, or disposal of any Hazardous Materials on or under the Mortgaged Property (whether as a result of activities on the Mortgaged Property or on surrounding properties) or any other property of any Indemnitor that is adjacent to the Mortgaged Property;

(ii) the transportation of any Hazardous Materials to, from, or across the Mortgaged Property (whether as a result of activities on the Mortgaged Property or on surrounding properties);

(iii) any occurrence or condition on the Mortgaged Property (whether as a result of activities on the Mortgaged Property or on surrounding properties) or any other property of any Indemnitor that is adjacent to the Mortgaged Property, which occurrence or condition is or may be in violation of Hazardous Materials Laws;

(iv) any violation of or noncompliance with the terms of any Environmental Permit with respect to the Mortgaged Property or any property of any Indemnitor that is adjacent to the Mortgaged Property;

(v) the imposition of any environmental lien against the Mortgaged Property; or

(vi) any violation or noncompliance with the terms of any O&M Program.
The matters described in clauses (i) through (vi) above, except as otherwise provided in Section 3(b), are referred to collectively in this Agreement as “Prohibited Activities or Conditions”.

(b) Prohibited Activities or Conditions shall not include lawful conditions permitted by an O&M Program or the safe and lawful use and storage of quantities of (1) pre-packaged supplies, cleaning materials, petroleum products, household products, paints, solvents, lubricants and other materials customarily used in the construction, operation, maintenance or use of comparable multifamily properties, (2) cleaning materials, household products, personal grooming items and other items sold in pre-packaged containers for consumer use and used by tenants and occupants of residential dwelling units in the Mortgaged Property; and (3) petroleum products used in the operation and maintenance of motor vehicles from time to time located on the Mortgaged Property’s parking areas, so long as all of the foregoing are used, stored, handled, transported and disposed of in compliance with Hazardous Materials Laws.

(c) Each Indemnitor shall take all commercially reasonable actions (including the inclusion of appropriate provisions in any Leases executed after the date hereof) to prevent its employees, agents, and contractors, and all tenants and other occupants from causing or permitting any Prohibited Activities or Conditions. Indemnitor shall not lease or allow the sublease or use of all or any portion of the Mortgaged Property to any tenant or subtenant for nonresidential use by any user that, in the ordinary course of its business, would cause or permit any Prohibited Activity or Condition.

(d) If and as reasonably required by Lender, Borrower shall also establish a written operations and maintenance program with respect to certain Hazardous Materials. Each such operations and maintenance program and any additional or revised operations and maintenance programs established for the Mortgaged Property pursuant to this Agreement must be approved by Lender, such approval not to be unreasonably delayed, withheld or conditioned, and shall be referred to herein as an “O&M Program.” Borrower shall comply in a timely manner with, and cause all of its employees, agents, and contractors and any other persons present on the Mortgaged Property to comply, in all material respects, with each O&M Program. Borrower shall pay all costs of performance of its obligations under any O&M Program, and any Beneficiary Party’s out-of-pocket costs incurred by such Beneficiary Party in connection with the monitoring and review of each O&M Program and Borrower’s performance shall be paid by Borrower upon demand by such Beneficiary Party.

(e) Without limitation of the foregoing, (1) Borrower hereby agrees to implement and maintain during the entire term of the Project Owner Subordinate Loan the moisture management program/microbial operations and maintenance program described in that certain Borrower’s Certificate and Agreement dated as of the date hereof, and (2) if asbestos-containing materials are found to exist at the Mortgaged Property, the O&M Program with respect thereto shall be undertaken consistent with the Guidelines for Controlling Asbestos-Containing Materials in Buildings (USEPA, 1985) and other relevant guidelines and applicable Hazardous Materials Laws.
With respect to any O&M Program, Lender may require (1) periodic notices or reports to Lender in form, substance and at such intervals as Lender may reasonably specify; (2) amendments to such O&M Program to address changing circumstances, laws or other matters, including without limitation variations in response to reports provided by environmental consultants; and (3) execution of an Operations and Maintenance Agreement relating to such O&M Program reasonably satisfactory to Lender.

4. **Representations and Warranties.** Each Indemnitor, on its own behalf, represents and warrants to Beneficiary Parties that, except as otherwise disclosed in the environmental reports described on Exhibit A (the “Environmental Reports”):

   (a) Indemnitor has not at any time engaged in, caused or permitted any Prohibited Activities or Conditions;

   (b) to the best of Indemnitor’s knowledge after reasonable and diligent inquiry, no Prohibited Activities or Conditions exist or have existed; and Indemnitor has provided Lender with copies of all reports and information acquired in such inquiries;

   (c) the Mortgaged Property (1) does not now contain any underground storage tanks, and, (2) to the best of Indemnitor’s knowledge, has not contained any underground storage tanks in the past. If there is an underground storage tank located on the Mortgaged Property which has been disclosed in the Environmental Reports, that tank complies with all requirements of Hazardous Materials Laws;

   (d) Indemnitor has complied with and will continue to comply with all Hazardous Materials Laws, including all requirements for notification regarding releases of Hazardous Materials. Without limiting the generality of the foregoing, Indemnitor has obtained, or will timely obtain, all Environmental Permits required for the operation of the Mortgaged Property in accordance with Hazardous Materials Laws now in effect and all such Environmental Permits are, or will be when obtained as and when required by applicable law or in connection with the planned development of the Mortgaged Property, in full force and effect;

   (e) no event has occurred with respect to the Mortgaged Property that constitutes, or with the passing of time or the giving of notice would constitute, noncompliance with the terms of any Environmental Permit or Hazardous Materials Law;

   (f) there are no actions, suits, claims or proceedings pending or, to the best of Indemnitor’s knowledge after reasonable and diligent inquiry, threatened that involve the Mortgaged Property and allege, arise out of, or relate to any Prohibited Activity or Condition;

   (g) Indemnitor has not received any complaint, order, notice of violation or other communication from any Governmental Authority with regard to air emissions, water discharges, noise emissions or Hazardous Materials, or any other environmental, health or safety matters affecting the Mortgaged Property or any other property of Indemnitor that is adjacent to the Mortgaged Property;
(h) no prior Remedial Work (as defined below) has been undertaken, and no Remedial Work is ongoing, with respect to the Mortgaged Property during Borrower’s ownership thereof or, to the best of Indemnitor’s knowledge after reasonable and diligent inquiry, at any time prior to Borrower’s ownership thereof, except as set forth in the Environmental Reports; and

(i) Indemnitor has disclosed herein all material facts known to Indemnitor or contained in Indemnitor’s records, the nondisclosure of which could cause any representation and warranty made herein or any statement made in the Environmental Report to be false or materially misleading.

The representations and warranties in this Agreement shall be continuing representations and warranties that shall be deemed to be made by each Indemnitor throughout the term of the Project Owner Subordinate Loan until the Indebtedness has been paid in full or otherwise discharged.

5. **Covenants of Indemnitor.** Each Indemnitor does hereby covenant and agree with Indemnitees that:

(a) Indemnitor shall promptly notify Lender in writing upon the occurrence of any of the following events:

   (i) Indemnitor’s discovery of any Prohibited Activity or Condition;

   (ii) Indemnitor’s receipt of or knowledge of any complaint, order, notice of violation or other communication from any tenant, management agent, Governmental Authority or other person with regard to present or future alleged Prohibited Activities or Conditions or any other environmental, health or safety matters affecting the Mortgaged Property or any other property of any Indemnitor that is adjacent to the Mortgaged Property;

   (iii) Indemnitor’s receipt of or knowledge of any personal injury claim, proceeding or cause of action directly or indirectly arising as a result of the presence of asbestos or other Hazardous Materials on or from the Mortgaged Property;

   (iv) Indemnitor’s discovery that any representation or warranty in this Agreement has become adversely untrue after the date of this Agreement; and

   (v) Any Indemnitor’s breach of any of its obligations under this Agreement.

Any such notice given by Indemnitor shall not relieve Indemnitor of, or result in a waiver of, any obligation under this Agreement, or any Project Owner Subordinate Loan Document.

(b) Indemnitor shall pay promptly the costs of any environmental inspections, tests or audits (“Environmental Inspections”) required by Lender or any Beneficiary
Party in connection with any foreclosure or deed in lieu of foreclosure, or as a condition of Lender’s consent to any Transfer, or required by Lender following a reasonable determination by Lender that Prohibited Activities or Conditions may exist. The results of all Environmental Inspections shall at all times remain the property of Lender, but upon Indemnitor’s request upon payment of the cost of an Environmental Inspection by or on behalf of Borrower, and Lender shall make available to Indemnitor such results or any other information obtained by Lender in connection with its Environmental Inspections. Lender hereby reserves the right, and Indemnitor hereby expressly authorizes Lender, to make available to any party, including any prospective bidder at a foreclosure sale of the Mortgaged Property, the results of any Environmental Inspections with respect to the Mortgaged Property. Indemnitor consents to Lender notifying any such party (either as part of a notice of sale or otherwise) of the results of any Environmental Inspections. Indemnitor acknowledges that Beneficiary Parties cannot control or otherwise ensure the truthfulness or accuracy of the results of the Environmental Inspections and that the release of such results to prospective bidders at a foreclosure sale of the Mortgaged Property may have a material and adverse effect upon the amount which a party may bid at such sale. Indemnitor agrees that no Beneficiary Party shall have any liability whatsoever as a result of delivering the results of any of the Environmental Inspections to any third party, and Indemnitor hereby releases and forever discharges Beneficiary Parties from any and all claims, damages, or causes of action, arising out of, connected with or incidental to the results of, the delivery of any Environmental Inspections.

(c) If any investigation, site monitoring, containment, clean-up, restoration or other remedial work (“Remedial Work”) is necessary to comply with or cure a violation of any Hazardous Materials Law or order of any Governmental Authority that has or acquires jurisdiction over the Mortgaged Property or the use, operation or improvement of the Mortgaged Property under any Hazardous Materials Law, or is otherwise required by Lender as a consequence of any Prohibited Activity or Condition or to prevent the occurrence of a Prohibited Activity or Condition, Indemnitor shall, by the earlier of (1) the applicable deadline required by such Hazardous Materials Law or (2) thirty (30) days after notice from Lender, demanding such action, begin performing the Remedial Work, and thereafter diligently prosecute it to completion, and shall in any event complete the work by the time required by such Hazardous Materials Law. Indemnitor shall promptly provide Lender with a cost estimate from an environmental consultant reasonably acceptable to Lender to complete any required Remedial Work. If required by Lender, Indemnitor shall promptly establish with Lender a reserve fund in the amount of such estimate. If, in Lender’s reasonable opinion, the amount reserved at any time during the Remedial Work is insufficient to cover the work remaining to complete the Remediation or achieve compliance, Indemnitor shall increase the amount reserved in compliance with Lender’s written request. All amounts so held in reserve, until disbursed, are pledged to Beneficiary Parties as security for payment of Indemnitor’s obligations under this Agreement. If Indemnitor fails to begin on a timely basis or diligently prosecute any required Remedial Work, Lender may, at its option, cause the Remedial Work to be completed, in which case Indemnitor shall reimburse Beneficiary Parties on demand for the cost of doing so.
(d) Indemnitor shall comply with all Hazardous Materials Laws applicable to the Mortgaged Property. Without limiting the generality of the previous sentence, Indemnitor shall (1) obtain and maintain all Environmental Permits required by Hazardous Materials Laws and comply with all conditions of such Environmental Permits; (2) cooperate with any inquiry by any Governmental Authority; and (3) comply with any governmental or judicial order that arises from any alleged Prohibited Activity or Condition.

6. **Indemnification.**

(a) **INDEMNITOR SHALL INDEMNIFY, HOLD HARMLESS AND DEFEND INDEMNITEES FROM AND AGAINST ALL LOSSES, PROCEEDINGS, CLAIMS, DAMAGES, PENALTIES AND COSTS (WHETHER INITIATED OR SOUGHT BY GOVERNMENTAL AUTHORITIES OR PRIVATE PARTIES), INCLUDING, WITHOUT LIMITATION, FEES AND OUT-OF-POCKET EXPENSES OF ATTORNEYS AND EXPERT WITNESSES, ENGINEERING FEES, ENVIRONMENTAL CONSULTANT FEES, INVESTIGATORY FEES AND REMEDIATION COSTS (INCLUDING, WITHOUT LIMITATION, ANY FINANCIAL ASSURANCES REQUIRED TO BE POSTED FOR COMPLETION OF REMEDIAL WORK AND COSTS ASSOCIATED WITH ADMINISTRATIVE OVERSIGHT), AND OF ANY LIABILITIES OF WHATEVER KIND AND NATURE, WHETHER INCURRED IN CONNECTION WITH ANY JUDICIAL OR ADMINISTRATIVE PROCESS OR OTHERWISE, ARISING DIRECTLY OR INDIRECTLY FROM ANY OF THE FOLLOWING:

(i) ANY BREACH OF ANY REPRESENTATION OR WARRANTY OF ANY INDEMNITOR IN THIS AGREEMENT;

(ii) ANY FAILURE BY ANY INDEMNITOR TO PERFORM ANY OF ITS OBLIGATIONS UNDER THIS AGREEMENT;

(iii) THE EXISTENCE OR ALLEGED EXISTENCE OF ANY PROHIBITED ACTIVITY OR CONDITION;

(iv) THE PRESENCE OR ALLEGED PRESENCE OF HAZARDOUS MATERIALS ON OR UNDER THE MORTGAGED PROPERTY OR IN ANY OF THE IMPROVEMENTS OR ON OR UNDER ANY PROPERTY OF ANY INDEMNITOR THAT IS ADJACENT TO THE MORTGAGED PROPERTY;

(v) THE ACTUAL OR ALLEGED VIOLATION OF ANY HAZARDOUS MATERIALS LAW;

(vi) ANY LOSS OR DAMAGE RESULTING FROM A LOSS OF PRIORITY OF THE SUBORDINATE SECURITY INSTRUMENT OR ANY OTHER PROJECT OWNER SUBORDINATE LOAN DOCUMENT DUE TO AN IMPOSITION OF A LIEN AGAINST THE MORTGAGED PROPERTY; AND
(vii) ANY PERSONAL INJURY CLAIM, PROCEEDING OR CAUSE OF ACTION DIRECTLY OR INDIRECTLY ARISING AS A RESULT OF THE PRESENCE OF ASBESTOS OR OTHER HAZARDOUS MATERIALS ON OR FROM THE MORTGAGED PROPERTY.

(b) COUNSEL SELECTED BY ANY INDEMNITOR TO DEFEND INDEMNITEES SHALL BE SUBJECT TO THE APPROVAL OF THOSE INDEMNITEES. IN ANY CIRCUMSTANCES IN WHICH THE INDEMNITY UNDER THIS AGREEMENT APPLIES, ANY BENEFICIARY PARTY MAY EMPLOY ITS OWN LEGAL COUNSEL AND CONSULTANTS TO PROSECUTE, DEFEND OR NEGOTIATE ANY CLAIM OR LEGAL OR ADMINISTRATIVE PROCEEDING AT INDEMNITOR’S EXPENSE, AND SUCH BENEFICIARY PARTY, WITH THE PRIOR WRITTEN CONSENT OF INDEMNITOR (WHICH SHALL NOT BE UNREASONABLY WITHHELD, DELAYED OR CONDITIONED) MAY SETTLE OR COMPROMISE ANY ACTION OR LEGAL OR ADMINISTRATIVE PROCEEDING. INDEMNITOR SHALL REIMBURSE SUCH BENEFICIARY PARTY UPON DEMAND FOR ALL COSTS AND EXPENSES INCURRED BY SUCH BENEFICIARY PARTY, INCLUDING, WITHOUT LIMITATION, ALL COSTS OF SETTLEMENTS ENTERED INTO IN GOOD FAITH AND THE FEES AND OUT-OF-POCKET EXPENSES OF SUCH ATTORNEYS AND CONSULTANTS.

(c) INDEMNITOR SHALL NOT, WITHOUT THE PRIOR WRITTEN CONSENT OF THOSE INDEMNITEES WHO ARE NAMED AS PARTIES TO A CLAIM OR LEGAL OR ADMINISTRATIVE PROCEEDING (A “CLAIM”), SETTLE OR COMPROMISE THE CLAIM IF THE SETTLEMENT (1) RESULTS IN THE ENTRY OF ANY JUDGMENT THAT DOES NOT INCLUDE AS AN UNCONDITIONAL TERM THE DELIVERY BY THE CLAIMANT OR PLAINTIFF TO BENEFICIARY PARTIES OF A WRITTEN RELEASE OF THOSE INDEMNITEES, SATISFACTORY IN FORM AND SUBSTANCE TO LENDER; OR (2) MAY MATERIALLY AND ADVERSELY AFFECT BENEFICIARY PARTIES, AS DETERMINED BY LENDER IN ITS DISCRETION.

(d) INDEMNITOR’S OBLIGATION TO INDEMNIFY THE INDEMNITEES SHALL NOT BE LIMITED OR IMPAIRED BY ANY OF THE FOLLOWING, OR BY ANY FAILURE OF ANY INDEMNITOR OR ANY GUARANTOR TO RECEIVE NOTICE OF OR CONSIDERATION FOR ANY OF THE FOLLOWING:

(i) ANY AMENDMENT OR MODIFICATION OF ANY PROJECT OWNER SUBORDINATE LOAN DOCUMENT;

(ii) ANY EXTENSIONS OF TIME FOR PERFORMANCE REQUIRED BY ANY PROJECT OWNER SUBORDINATE LOAN DOCUMENT;
(iii) ANY PROVISION IN ANY PROJECT OWNER SUBORDINATE LOAN DOCUMENT LIMITING BENEFICIARY PARTIES’ RECOURSE TO ANY PROPERTY SECURING THE INDEBTEDNESS, OR LIMITING THE PERSONAL LIABILITY OF ANY INDEMNITOR OR ANY OTHER PARTY FOR PAYMENT OF ALL OR ANY PART OF THE INDEBTEDNESS;

(iv) THE ACCURACY OR INACCURACY OF ANY REPRESENTATIONS AND WARRANTIES MADE BY ANY INDEMNITOR UNDER THIS AGREEMENT OR ANY PROJECT OWNER SUBORDINATE LOAN DOCUMENT;

(v) THE RELEASE OF ANY INDEMNITOR OR ANY OTHER PERSON, BY BENEFICIARY PARTIES OR BY OPERATION OF LAW, FROM PERFORMANCE OF ANY OBLIGATION UNDER ANY PROJECT OWNER SUBORDINATE LOAN DOCUMENT;

(vi) THE RELEASE OR SUBSTITUTION IN WHOLE OR IN PART OF ANY SECURITY FOR THE INDEBTEDNESS; AND

(vii) FAILURE BY BENEFICIARY PARTIES TO PROPERLY PERFECT ANY LIEN OR SECURITY INTEREST GIVEN AS SECURITY FOR THE INDEBTEDNESS.

(c) INDEMNITOR SHALL, AT ITS OWN COST AND EXPENSE, DO ALL OF THE FOLLOWING:

(i) PAY OR SATISFY ANY JUDGMENT OR DECREE THAT MAY BE ENTERED AGAINST ANY INDEMNITEE OR INDEMNITEES IN ANY LEGAL OR ADMINISTRATIVE PROCEEDING INCIDENT TO ANY MATTERS AGAINST WHICH INDEMNITEES ARE ENTITLED TO BE INDEMNIFIED UNDER THIS AGREEMENT;

(ii) REIMBURSE INDEMNITEES FOR ANY AND ALL EXPENSES PAID OR INCURRED IN CONNECTION WITH ANY MATTERS AGAINST WHICH INDEMNITEES ARE ENTITLED TO BE INDEMNIFIED UNDER THIS AGREEMENT; AND

(iii) REIMBURSE INDEMNITEES FOR ANY AND ALL EXPENSES, INCLUDING, WITHOUT LIMITATION, FEES AND OUT-OF-POCKET EXPENSES OF ATTORNEYS AND EXPERT WITNESSES, PAID OR INCURRED IN CONNECTION WITH THE ENFORCEMENT BY INDEMNITEES OF THEIR RIGHTS UNDER THIS AGREEMENT, OR IN MONITORING AND PARTICIPATING IN ANY LEGAL OR ADMINISTRATIVE PROCEEDING.

(f) Notwithstanding anything herein to the contrary, (i) Indemnitor shall have no obligation hereunder to indemnify any Indemnitee for any liability under this Section

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6 to the extent that the Prohibited Activity or Condition giving rise to such liability resulted solely from the gross negligence or willful misconduct of any Indemnitee, and (ii) Indemnitor’s liability under this Section 6 shall not extend to cover the violation of any Hazardous Materials Laws or Prohibited Conditions that first arise, commence or occur as a result of actions of any Indemnitee or Beneficiary Parties or their successors, assigns or designees, after the satisfaction, discharge, release, assignment, termination or cancellation of the Subordinate Security Instrument following the payment in full of the Project Owner Subordinate Note and all other sums payable under the Project Owner Subordinate Loan Documents or after the actual dispossession from the entire Mortgaged Property of the Borrower and all entities which control, are controlled by, or are under common control with the Borrower or any other Indemnitor following foreclosure of the Subordinate Security Instrument or acquisition of the Mortgaged Property by a deed in lieu of foreclosure.

7. **Survival.** This Agreement shall survive the satisfaction or release of the Subordinate Security Instrument and the other Project Owner Subordinate Loan Documents by full and final payment of all obligations of Indemnitor to Beneficiary Parties, by foreclosure of Borrower’s equity of redemption in the Mortgaged Property (whether by power of sale or judicial proceedings), by deed in lieu of foreclosure or by any other comparable means and the conveyance or disposition of any Indemnitor’s interest in the Mortgaged Property, and shall continue in full force and effect forever, irrespective of any such foreclosure and/or satisfaction of the obligations of any Indemnitor in connection with the Project Owner Subordinate Loan.

8. **Conflicting Provisions.** Borrower acknowledges and agrees that its covenants and obligations hereunder are in addition to, and separate and distinct from, the obligations under the Subordinate Security Instrument.

9. **Joint and Several Liability.** If more than one person executes this Agreement, the obligations of those persons under this Agreement and any other Indemnitor (an “Other Indemnitor”) shall be joint and several. Beneficiary Parties, in their sole and absolute discretion, may (a) bring suit against Indemnitor, or any one or more of the persons constituting Indemnitor, and any Other Indemnitor, jointly and severally, or against any one or more of them; (b) compromise or settle with any one or more of the persons constituting Indemnitor or any Other Indemnitor for such consideration as Beneficiary Parties may deem proper; (c) release one or more of the persons constituting Indemnitor, or any Other Indemnitor, from liability; and/or (d) otherwise deal with Indemnitor and any Other Indemnitor, or any one or more of them, in any manner, and no such action shall impair the rights of Beneficiary Parties to collect from Indemnitor any amount owed by Indemnitor under this Agreement. Nothing contained in this paragraph shall in any way affect or impair the rights or obligations of Indemnitor with respect to any Other Indemnitor.

10. **[RESERVED].**

11. **Determinations by Lender.** Except to the extent expressly set forth in this Agreement to the contrary, in any instance where the consent or approval of Lender may be given or is required, or where any determination, judgment or decision is to be rendered by Lender under this Agreement, the granting, withholding or denial of such consent or approval...
and the rendering of such determination, judgment or decision shall be made or exercised by Lender, as applicable (or its designated representative) at its sole and exclusive option and in its sole and absolute discretion.

12. **Release; Indemnity.**

   (a) **Release.** Without limitation to the provisions of Section 6, Indemnitor covenants and agrees that, in performing any of their rights or duties under this Agreement, neither the Indemnitees, nor their agents or employees, shall be liable for any losses, claims, damages, liabilities and expenses that may be incurred by any of them as a result of such performance, except to the extent such liability for any losses, claims, damages, liabilities or expenses arises out of the willful misconduct or gross negligence of any Indemnitee.

   (b) **Indemnity.** Without limitation to the provisions of Section 6, Indemnitor hereby agrees to indemnify and hold harmless the Indemnitees and their respective agents and employees from and against any and all losses, claims, damages, liabilities and expenses including, without limitation, reasonable attorneys’ fees and costs and disbursements, which may be imposed or incurred by any of them in connection with this Agreement, except that no such party will be indemnified for any losses, claims, damages, liabilities or expenses arising out of the willful misconduct or gross negligence of any Indemnitee.

13. **Governing Law.** This Agreement shall be governed by and enforced in accordance with the laws of the Property Jurisdiction, without giving effect to the choice of law principles of the Property Jurisdiction that would require the application of the laws of a jurisdiction other than the Property Jurisdiction.

14. **Consent to Jurisdiction and Venue.** Indemnitor agrees that any controversy arising under or in relation to this Agreement shall be litigated exclusively in the Property Jurisdiction. The state and federal courts and authorities with jurisdiction in the Property Jurisdiction shall have exclusive jurisdiction over all controversies which shall arise under or in relation to this Agreement. Indemnitor irrevocably consents to service, jurisdiction, and venue of such courts for any such litigation and waives any other venue to which it might be entitled by virtue of domicile, habitual residence or otherwise. However, nothing herein is intended to limit Beneficiary Parties’ right to bring any suit, action or proceeding relating to matters arising under this Agreement against Indemnitor or any of Indemnitor’s assets in any court of any other jurisdiction.

15. **Successors and Assigns.** This Agreement shall be binding upon Indemnitor and its heirs, legal representatives, successors, successors-in-interest and assigns, as appropriate, and shall inure to the benefit of the Beneficiary Parties and their respective successors, successors-in-interest and assigns. The terms used to designate any of the parties herein shall be deemed to include the heirs, legal representatives, successors, successors-in-interest and assigns, as appropriate, of such parties. References to a “person” or “persons” shall be deemed to include individuals and entities. Indemnitor acknowledges and agrees that any Beneficiary Party, at its option, may assign its respective rights and interests under this Agreement and the other Project.
Owner Subordinate Loan Documents in whole or in part and upon such assignment all the terms and provisions of this Agreement or the other Project Owner Subordinate Loan Documents shall inure to the benefit of such assignee to the extent so assigned. Indemnitor may not assign or delegate its rights, interests or obligations under this Agreement without first obtaining Lender’s prior written consent.

16. **Severability.** The invalidity, illegality or unenforceability of any provision of this Agreement shall not affect the validity, legality or enforceability of any other provision, and all other provisions shall remain in full force and effect.

17. **Expenses.** Indemnitor shall pay to the Beneficiary Parties, upon demand, the amount of any and all expenses, including, without limitation, reasonable attorneys’ fees (including reasonable time charges of attorneys who may be employees of Beneficiary Parties), which the Beneficiary Parties may incur in connection with (a) the exercise or enforcement of any of their rights hereunder, (b) the failure by Indemnitor to perform or observe any of the provisions hereof, or (c) the breach by Indemnitor of any representation or warranty of Indemnitor set forth herein. Such expenses, together with interest thereon computed at the Default Rate set forth in the Project Owner Subordinate Note from the date on which such expenses are incurred to the date of payment thereof, shall constitute indebtedness secured by the Subordinate Security Instrument.

18. **Remedies Cumulative.** In the event of Indemnitor’s default under this Agreement, the Beneficiary Parties may exercise all or any one or more of their rights and remedies available under this Agreement, at law or in equity. Such rights and remedies shall be cumulative and concurrent, and may be enforced separately, successively or together, and the exercise of any particular right or remedy shall not in any way prevent the Beneficiary Parties from exercising any other right or remedy available to the Beneficiary Parties. The Beneficiary Parties may exercise any such remedies from time to time as often as may be deemed necessary by the Beneficiary Parties.

19. **No Agency or Partnership.** Nothing contained in this Agreement shall constitute any Beneficiary Party as a joint venturer, partner or agent of Indemnitor, or render any Beneficiary Party liable for any debts, obligations, acts, omissions, representations or contracts of Indemnitor.

20. **Transfer of Mortgaged Property or Ownership Interests in Borrower.** If a Transfer (as defined in the Subordinate Security Instrument) of all or part of the Mortgaged Property or of an ownership interest in Borrower, shall occur or be contemplated, which Transfer requires the prior written consent of Lender, the transferee(s) shall be required to assume Borrower’s duties and obligations under this Agreement and the other Project Owner Subordinate Loan Documents and shall be required to execute and deliver to Lender such documents as Lender requires to effectuate such assumption of duties and obligations. No transfer and assumption shall relieve the transferor of any of its duties or obligations under this Agreement or any of the other Project Owner Subordinate Loan Documents, unless the Borrower has obtained the prior written consent of Lender to the release of such duties and obligations.
21. **Entire Agreement; Amendment and Waiver.** This Agreement contains the complete and entire understanding of the parties with respect to the matters covered herein. This Agreement may not be amended, modified or changed, nor shall any waiver of any provision hereof be effective, except by a written instrument signed by the party against whom enforcement of the waiver, amendment, change, or modification is sought, and then only to the extent set forth in that instrument. No specific waiver of any of the terms of this Agreement shall be considered as a general waiver.

22. **Further Assurances.** Indemnitor shall at any time and from time to time, promptly execute and deliver all further instruments and documents, and take all further action that may be reasonably necessary or desirable, or that any Beneficiary Party may reasonably request, in order to protect any right or interest granted by this Agreement or to enable the Beneficiary Party to exercise and enforce its rights and remedies under this Agreement.

23. **No Amendment; Conflicts.** Nothing contained in this Agreement shall be construed to amend, modify, alter, change or supersede the terms and provisions of the Project Owner Subordinate Note, the Subordinate Security Instrument or the Loan Agreement; and, if there is a conflict between the terms and provisions of this Agreement and those of the Project Owner Subordinate Note, the Subordinate Security Instrument or the Loan Agreement, then the terms and provisions of the Project Owner Subordinate Note, the Subordinate Security Instrument or the Loan Agreement shall control.

24. **Notices.** All notices given under this Agreement shall be in writing and shall be sent to the respective addresses of the parties, in the manner set forth in the Subordinate Security Instrument.

25. **Counterparts.** This Agreement may be executed in multiple counterparts, each of which shall constitute an original document and all of which together shall constitute one agreement.

26. **Captions.** The captions of the sections of this Agreement are for convenience only and shall be disregarded in construing this Agreement.

27. **Servicer.** Indemnitor hereby acknowledges and agrees that, pursuant to the terms of the Subordinate Security Instrument: (a) from time to time, Lender may appoint a servicer to collect payments, escrows and deposits, to give and to receive notices under the Project Owner Subordinate Note, this Agreement or the other Project Owner Subordinate Loan Documents, and to otherwise service the Project Owner Subordinate Loan and (b) unless Indemnitor receives written notice from Lender to the contrary, any action or right which shall or may be taken or exercised by Lender may be taken or exercised by such servicer with the same force and effect.

28. **Beneficiary Parties as Third Party Beneficiary.** Each of the Beneficiary Parties shall be a third party beneficiary of this Agreement for all purposes.

29. **Waiver of Trial by Jury.** TO THE MAXIMUM EXTENT PERMITTED UNDER APPLICABLE LAW, EACH OF INDEMNITOR AND THE BENEFICIARY PARTIES (A) COVENANTS AND AGREES NOT TO ELECT A TRIAL BY JURY WITH RESPECT TO ANY ISSUE ARISING OUT OF THIS AGREEMENT OR THE
RELATIONSHIP BETWEEN THE PARTIES THAT IS TRIABLE OF RIGHT BY A JURY AND (B) WAIVES ANY RIGHT TO TRIAL BY JURY WITH RESPECT TO SUCH ISSUE TO THE EXTENT THAT ANY SUCH RIGHT EXISTS NOW OR IN THE FUTURE. THIS WAIVER OF RIGHT TO TRIAL BY JURY IS SEPARATELY GIVEN BY EACH PARTY, KNOWINGLY AND VOLUNTARILY WITH THE BENEFIT OF COMPETENT LEGAL COUNSEL.

30. **Time of the Essence.** Time is of the essence with respect to this Agreement.

31. **Modifications.** All modifications (if any) to the terms of this Agreement (“Modifications”) are set forth on Exhibit B attached to this Agreement. In the event of a Transfer under the terms of the Subordinate Security Instrument, some or all of the Modifications to this Agreement may be modified or rendered void by Lender at its option by notice to Indemnitor or such transferee.

32. **Attached Exhibits.** The following Exhibits are attached to this Agreement and are incorporated by reference herein as if more fully set forth in the text hereof:

   (a) Exhibit A – Environmental Reports

   (b) Exhibit B – Modifications to Agreement of Environmental Indemnification

   The terms of this Agreement are modified and supplemented as set forth in said Exhibits. To the extent of any conflict or inconsistency between the terms of said Exhibits and the text of this Agreement, the terms of said Exhibits shall be controlling in all respects.

   [REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]
IN WITNESS WHEREOF, each of the undersigned has duly executed and delivered this Agreement of Environmental Indemnification or caused this Agreement of Environmental Indemnification to be duly executed and delivered by its authorized representative as of the date first set forth above. Each of the undersigned intends that this instrument shall be deemed to be signed and delivered as a sealed instrument.

BORROWER:

RESERVE AT ENGEL ROAD, LLC
a Texas limited liability company
   By: MV Reserve at Engel Road LLC
       an Ohio limited liability company
   Its: Managing Member
      By: MV Affordable Housing LLC
          an Ohio limited liability company
      Its: Sole Member

      By: ____________________________
          Print Name: Elizabeth A. Mangan
          Title: Authorized Signer

Address:

c/o Miller Valentine Group
9349 WaterStone Blvd., #200
Cincinnati, Ohio 45249
GUARANTOR:

MV RESIDENTIAL CONSTRUCTION, INC.,
an Ohio corporation

By: ______________________________
    Elizabeth A. Mangan, Authorized Signer

Address:

9349 WaterStone Blvd., #200
Cincinnati, Ohio 45249

MV RESIDENTIAL PROPERTY MANAGEMENT, INC.,
an Ohio corporation

By: ______________________________
    Elizabeth A. Mangan, Authorized Signer

Address:

9349 WaterStone Blvd., #200
Cincinnati, Ohio 45249
EXHIBIT A

ENVIRONMENTAL REPORTS
EXHIBIT B
MODIFICATIONS TO
AGREEMENT OF ENVIRONMENTAL INDEMNIFICATION

The following modifications are made to the text of the Agreement that precedes this Exhibit:

[None.]
The Reserve at Engel

A Luxury Affordable Housing Development in New Braunfels, Texas

Presented by

Miller Valentine Group

Chris Applequist – Developer
Josh Pettijohn P.E. – Project Manager
Adrian Iglesias – Development Consultant
Overview – Miller Valentine Group

- Founded in 1963, MV has been in operation for over 50 years and owns over 13,000 units.

- Experienced, vertically integrated:
  - Development
  - Construction
  - Property Management
  - Asset Management

- Approximately 900 Associates with offices in Dayton and Cincinnati, Ohio; Columbia and Charleston, South Carolina; Charlotte, NC, and Dallas, TX.

- Recipient of multiple awards and recognition including:
  - Top 50 Affordable Housing Owners in the U.S.
  - Historic Adaptive Use Award
  - Certified “Green” contractor
  - Award of Excellence
The Reserve at Engel is a proposed 96-unit, Class “A”, service-enriched, residential development. Residents will enjoy high-quality units and resort style amenities.

**Common Amenities**
- Resort Style Pool with Wifi
- Cofe area with Starbucks Coffee
- Outdoor Kitchen
- Fitness Center
- 100% Masonry Exterior
- Ample Green Space
- Community Room
- Business Center
- Gazebo with BBQ Grills
- Lush landscaping

**Unit Amenities**
- 9’ Ceilings
- Low-e Windows
- Low-Flow Fixtures
- Berber Carpet
- Enlarged Balcony Areas
- Ample Storage
- Open Floor Plans
- Pre-Wired for Cable/Internet
- Washer/Dryer Hook ups
- Energy Star Appliances
Rent Matrix

The development will consist of one, two, and three-bedroom units with rent levels at 30%, 50% and 60% AMI.

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<th>Total Units</th>
<th>Bedroom Type</th>
<th>Baths</th>
<th>Style</th>
<th>Square Footage</th>
<th>Percent Of AMHI</th>
<th>Collected Rents</th>
<th>Utility Allowance</th>
<th>Gross Rents</th>
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<td>Garden</td>
<td>758</td>
<td>30%</td>
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<td>$331</td>
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<td>Garden</td>
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<td>$779</td>
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<td>$880</td>
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Requirements
- Verifiable Income
- Minimum Credit Score
- Must pass background check
- Must pass criminal history check
Resident Services

- Free after-school care
- Computer Access and Tutoring
- Financial Literacy Classes
- Health Awareness Classes

Potential Partnerships with Local Non-Profits

- Family Life Center
- New Braunfels Housing Partners
- McKenna Foundation
The Reserve

Competitiveness

- 1st Quartile Census Tract
- All three Schools Qualify for Points
- Recognized “High Opportunity Area”
- Will maximize all financial structuring points
- Will maximize all amenity and design points
- Additional points for marketing to veterans and persons with disabilities.

Tie-Breaker

- First Quartile Census Tract
- Furthest distance from existing Tax Credit Funded Housing
RESOLUTION NO. 2016-R __________

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF NEW BRAUNFELS TEXAS, APPROVING A RECOMMENDATION OF THE NEW BRAUNFELS INDUSTRIAL DEVELOPMENT CORPORATION TO APPROVE A LOAN AGREEMENT AND RELATED AGREEMENTS FOR THE COMMITMENT OF DEVELOPMENT FUNDING TO THE RESERVE AT ENGEL ROAD, LLC., A MULTI-FAMILY DEVELOPMENT; AND DECLARING AN EFFECTIVE DATE,

WHEREAS, the Reserve at Engel Road, LLC. (“Project Applicant”), an affiliate of MV Residential Development, LLC. (“the Developer or its related entity”) has proposed a development for affordable rental housing at the northeast corner of Engel Road and Interstate 35, named Reserve at Engel, TDHCA 2015 Application #15303, (“the Development”), in the City of New Braunfels, Comal County, Texas 78130; and

WHEREAS, the City of New Braunfels Industrial Development Corporation (“IDC”) Board of Directors met on February 19, 2015 and recommended approval of a project expenditure providing Project Applicant with a commitment of funding of up to $833,000 from the IDC; and

WHEREAS, the City Council of the City of New Braunfels adopted a Resolution approving the project expenditure on February 23, 2015 with the stipulation that upon the award of an allocation of Low Income Housing Tax Credits (“LIHTCs”) from the Texas Department of Housing and Community Affairs (“TDHCA”), the IDC and the Developer or its related entity would enter into separate documentation detailing the terms of the commitment of development funding upon notice of an award of tax credits; and

WHEREAS, the IDC Board of Directors met on March 10, 2016 and approved the loan agreement and related agreements for the proposed loan on behalf of the Project Applicant; and

WHEREAS, the Developer’s or its related entity’s receipt of LIHTCs for the Development will require it to comply with the requirements of 42 U.S.C. Section 12745; and

WHEREAS, the commitment of development funding does not require or imply the City of New Braunfels’ approval for the Developer’s or its related entity’s pursuit of land use and development regulation entitlements; and

WHEREAS, the Development must comply with all applicable state statutes, ordinances and development regulations of the City of New Braunfels and any requirements of other applicable governmental entities prior to the delivery of project funds; and
WHEREAS, the property located at the northeast corner of Engel Road and Interstate 35 is located in the city limits of the City of New Braunfels, Comal County, Texas; and

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF NEW BRAUNFELS, TEXAS:

SECTION 1: That the recommendation of the New Braunfels Industrial Development Corporation to approve a loan agreement and related agreements with Citibank to provide up to $833,000 to the Project Applicant is hereby approved; and

SECTION 2: That the City Council hereby authorizes the President of the IDC Board of Directors to enter into all appropriate agreements and documents related to the loan transaction; and

SECTION 3: That for and on behalf of the City Council, the City Secretary is hereby authorized, empowered, and directed to certify this resolution.

SECTION 4: That this Resolution shall become effective from and after the date of its passage.

PASSED, ADOPTED AND APPROVED this 24th day of March, 2016.

CITY OF NEW BRAUNFELS

By: _____________________________
    Barron Casteel, Mayor

ATTEST:

_____________________________________
    Patrick Aten, City Secretary