Merchants Row Master Plan

City of Barre, Vermont

April 15, 2010

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City of Barre, Vermont

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Merchants Row Master Plan

Sketch view of an improved Merchants Row.

Introduction

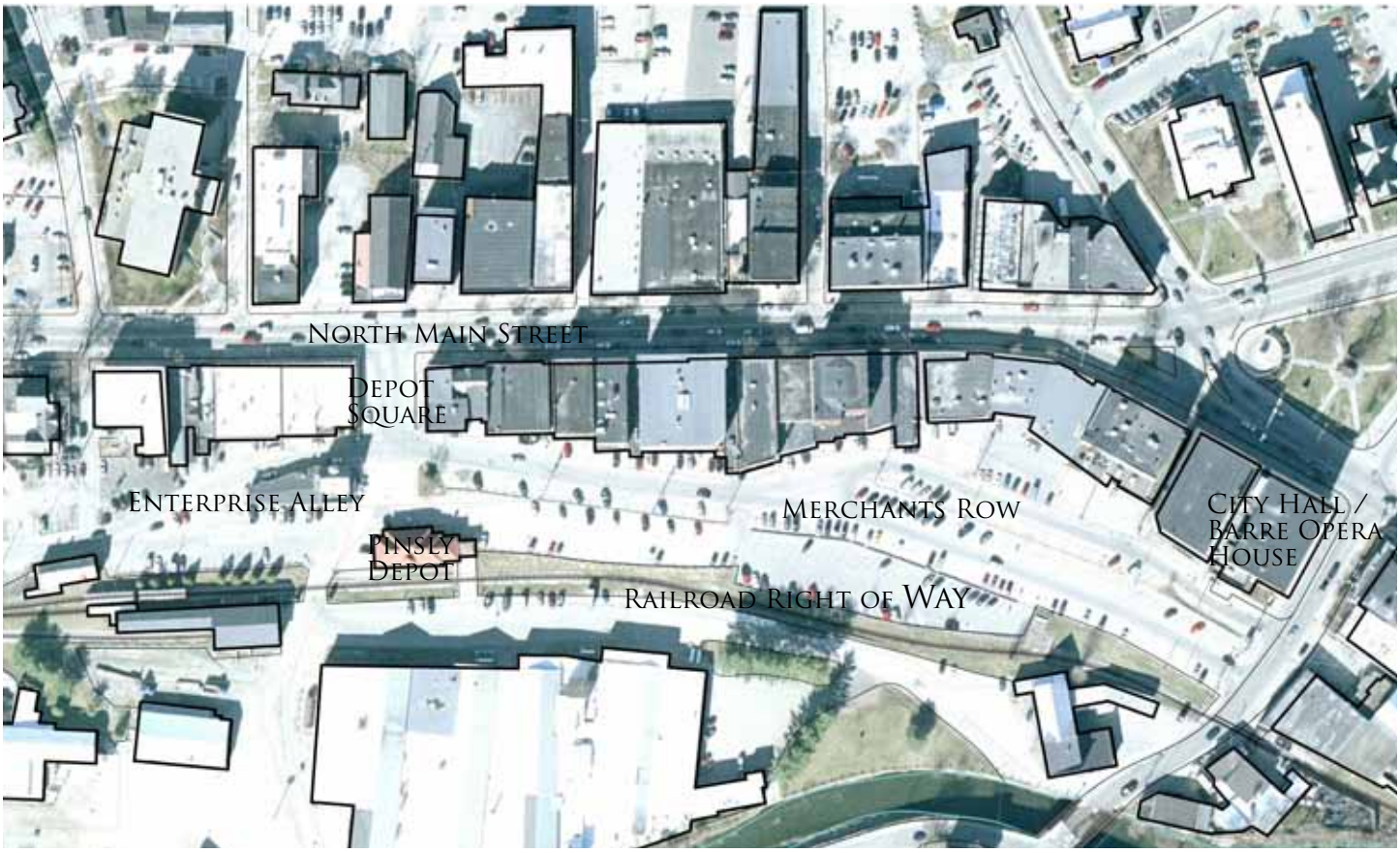
The Merchants Row and Enterprise Alley area of downtown Barre is a significant parking reservoir for the downtown. By virtue of its parallel orientation to Main Street, it also provides an alternative, parallel circulation to Main Street. For a number of years, the City of Barre has considered various options to improve the Merchant's Row parking area. The 2008 fire and subsequent demolition of the *All Fired Up* restaurant and the potential City purchase of the building at 16 Enterprise Alley provided a significant opportunity to look at the area once again to develop a plan for improved vehicular, pedestrian, bicycle and service circulation in the area. ORW Landscape Architects and Planners (ORW) and Resource Systems Group, Inc. (RSG) were engaged by the City of Barre to provide planning and design services to develop a Master Plan for the Merchants Row/ Enterprise Alley area of downtown.

The purpose of the master plan is to enhance the organization and design of the area to improve:

- the clarity of the parking and circulation
- pedestrian and bicycle accommodation;
- ADA accessibility; and
- the overall image and character of the area.

It is important to note that this project is a Master Plan for the Merchants Row that provides the overall vision and strategy for the area; this plan does not represent detailed construction documents for the area. There are some issues that should be resolved at the construction document level; these include:

- Evaluation of the need for two exit lanes onto Prospect Street;
- Determination of the final curb and turning radii for corners and pedestrian 'bump-outs';



Aerial view of Merchants Row and Enterprise Alley prior to the destruction of 'All Fired Up.'

- Lighting and photometrics of the area, particularly pedestrian walkways;

The final specification of these construction details should be designed to reinforce the overall objectives to calm and slow traffic and to clarify vehicular circulation and make the area accessible, pedestrian and bicycle friendly.

Planning Process

This work began in the summer of 2009 with site reconnaissance and informal discussion with stakeholders in the area to identify issues and opportunities for Merchants Row. The design team received a great deal of useful information from stakeholders including Town officials, merchants, representatives of the Granite Museum and the Barre Opera House. Through the fall ORW developed alternatives for the layout of Merchants Row. RSG, Inc. conducted a parking inventory, utilization study, and reviewed the schematic design alternatives. ORW met with a number of stakeholders, the City Council, the Planning Commission in November, 2009, January and February 2010, continually making refinements to the plan that respond to comments from the community.

Existing Conditions

The Merchants Row/Enterprise Alley areas of downtown Barre, an area generally bounded by the shops on the west side of Main Street, Prospect Street, the railroad right of way, and Granite Street is a large reservoir of parking that appears to have been laid out on a piecemeal basis over the years. While the area maximizes parking spaces, the circulation in the area is confusing. The area does not accommodate pedestrians well and accommodation for persons with disabilities is very poor. The separated entry and exit driveways into Merchants Row from Prospect Street create a number of problems including: cars miss the entry driveway and enter from the exit driveway; traffic speeds from Prospect Street are too fast; the split entry/exit drive-




Existing conditions views of Merchants Row.

ways expands the curb-cut / driveway zone and creates a wider obstacle for pedestrians on Prospect Street; the separate driveways consume more land and create 'wasted space' that would be better utilized as an expanded plaza entry for pedestrians at the Barre Opera House/City Hall.

The area has a bleak appearance. The area is, for the most part, an undifferentiated expanse of asphalt. At the same time, merchants report that fifty percent or more of their customers enter their businesses via Merchants Row. Clearly, Merchants Row has an important role to play in the image and identity of downtown Barre.

Existing conditions views of Merchants Row and Enterprise Alley.

Sketch view of Improved Depot Plaza.

Recommended Merchants Row Master Plan

Circulation and Parking Program

There are a number of 'core' circulation program elements that form the basis of the plan. These are summarized as follows:

> ***Pedestrian Circulation and Accessibility***. Improve the safety and connectivity of the pedestrian circulation system, including provision of walkways, crosswalks, ADA accessibility improvements, and public gathering spaces at entries to the Barre Opera House and Depot building.
>
> ***Bicycle Circulation***. Provide for a bike path parallel to the rail line.
>
> ***Vehicular Circulation***. Improve and clarify automobile circulation in the area. Calm traffic to improve safety for pedestrians in the area.
>
> ***Parking***. Minimize the loss of parking spaces.

There are a number of options that we were asked to consider in developing this Master Plan (such as evaluating making Depot Square a pedestrian only space, placing a separate road that would separate through traffic and parking lot circulation). We have duly considered these and other options in developing this recommendation.

Pedestrian Circulation

Sidewalk. One of the most significant improvements to the area is the provision of a continuous sidewalk along the rear entrance of the Main Street shops. Currently pedestrians are required to navigate between parked cars, through the parking lot to the Merchants Row shops. With the number of parking spaces here it is not surprising that merchants report that 50% or more of their customers enter from the back doors that open onto Merchants Row. The area does not meet ADA (Americans with Disabilities Act) standards for accessibility, and this is a major concern as well. The proposed walkways along the shops allow pedestrians to navigate the area more safely; provide for ADA accessibility; and remove cars that obstruct the shop doorways. One added benefit to a sidewalk along the shops is that the southern orientation of the buildings and sidewalk would provide an attractive sunny location for sidewalk sales, café seating and special events. Pedestrian crossings

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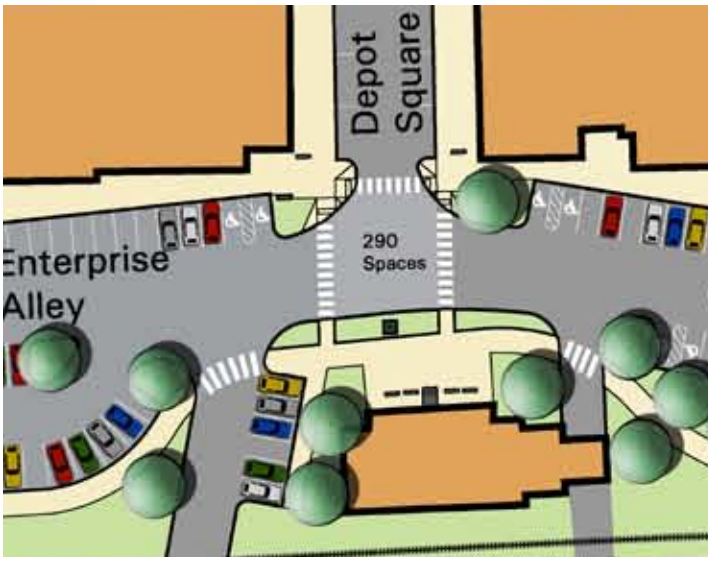
Illustrative Plan
Merchant's Row
Barre, VT

North:

Graphic Scale: 25' 0' 50' 100' 150' 200

4/15/10



Conceptual plan of Depot Plaza.

through the parking area are provided at regular intervals connecting the various zones of the parking lot to the sidewalk. Crossings connect directly to the cut-throughs to Main Street and the Depot Square sidewalks.

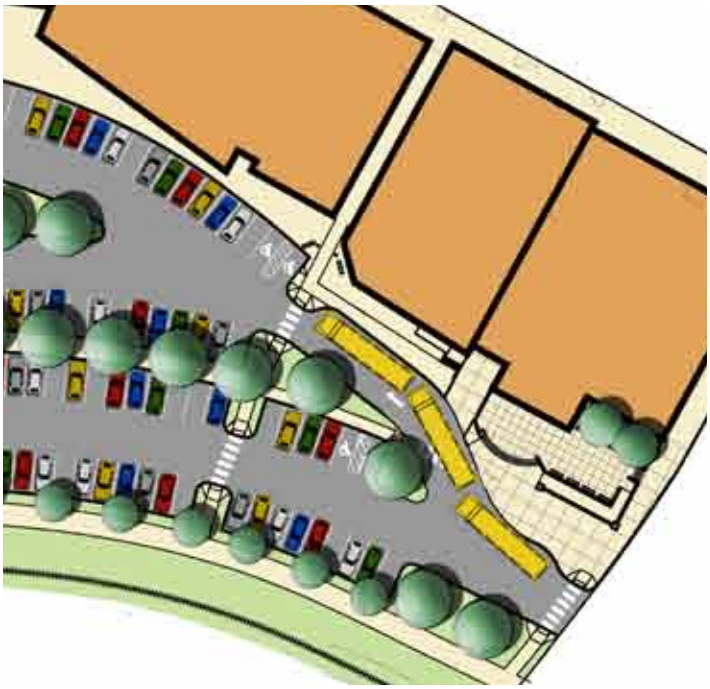
Barre Opera House/City Hall Square. A greatly expanded entry plaza area is provided at the Merchants Row entry to the Barre Opera House. Barre Opera House is in need of an expanded area for drop-off and pedestrian accommodation at the entry to the building. With a 650-seat venue that includes matinees for school events, the existing space is inadequate in size and poorly equipped to accommodate pedestrian demands of this scale. An expanded plaza space is provided in this location by consolidating the entry to Merchants Row from Prospect Street into a single point of entry and exit. This change addresses a number of problems in the area, including calming and slowing traffic entering from Prospect Street; moving the traffic away from the Barre Opera House/City Hall door; and providing better pedestrian circulation along Prospect Street by consolidating the auto entry and exit. The expanded plaza allows for an accessible entrance to the building and space for pedestrian gathering and lingering at the entrance. This area also allows for drop-off and loading or unloading of school buses in this area (see discussion below).

Pinsly Depot Plaza. A front entry plaza to the Pinsly Depot has long been envisioned for this historic building. This plaza space would provide for lingering and social gathering at this location, which befits the visitor center and other uses in the building. This space adds a gracious entry and approach to this historic building which enjoys an axial view down Depot Square to Main Street. Public spaces that are anchored to a building with public activity are going to be more vital and lively than spaces that are 'floating' in the parking and driveway area like the current island near the depot.

Improvements to Depot Square are part of the Main Street reconstruction project. We support wider sidewalks along Depot Square to improve the pedestrian environment and to better connect Main Street with Merchants Row parking and the Depot 'node.' We would not recommend closing Depot Square to vehicular traffic permanently because there is not enough activity along its edge to animate the space and it would likely be a rather dead space. With wider sidewalks, however, traffic will slowly traverse and use the space (which adds to the activity), and the businesses on either side could have café seating or sidewalk sales on these broader sidewalks. In addition, Depot Square serves a useful circulation function as an additional entry/exit point along a fairly long block. Depot Square could, however, be closed for special occasions, such as festivals and farmers markets. The broader sidewalks, plaza in front of the Depot and the improved pedestrian and bicycle circulation system would support such periodic activities.

Bicycle Circulation

Bike Path. The plan provides for a multi-use recreational path for bikes and pedestrians of 10-feet in width alongside the railroad tracks. This path is part of a long-standing effort by the City to connect Barre's downtown to Montpelier via the Central Vermont Bike Path. It is another project that Barre has long envisioned for this area. VTrans has reviewed this plan and indicated that the 20-foot separation is necessary. The path location is offset 20' from the railroad tracks as is typical for 'rail with trail' facilities per VTrans design standards. It would also require a fence separating the rail from the path. At the Depot, the bike path hits a pinch point and must either swing behind or in front of the Depot building. Either approach has drawbacks. If it is to be located behind the Depot, the area is very narrow and would not allow for a 20 foot offset from the rail.



Conceptual plan for improved entry from Prospect Street at Opera Square.

It would also traverse the historic rail platform which the current user envisions as a patio space for outdoor seating that is attractive due to its southern aspect. Swinging in front of the depot raises issues with potential bicycle and pedestrian conflicts at the plaza. At the request of the Vermont Granite Museum we have placed the bike path at the edge of the plaza to direct it away from the pedestrian area at the building entry. In this situation, this can be an area where bike riders are asked to slow down and even walk their bikes.

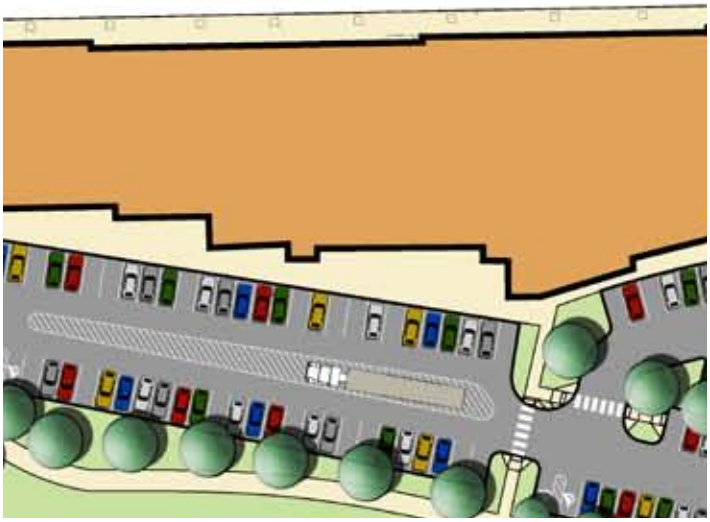
Vehicular Circulation

Cars. The overall approach of the recommended master plan is to calm and slow traffic and simplify the layout of parking and aisles to reduce driver confusion. As mentioned above, the separated entry at Prospect Street is combined into a two-direction single point of entry and exit. This will help to calm traffic entering Merchants Row and improve the pedestrian environment in this area. Cars can travel straight ahead or veer to the right for parking.

Drop Off. A drop off zone is provided along the Opera House/City Hall square curb edge. There is enough space here for three school buses or six cars. The expanded plaza allows space for groups to gather before entering or after exiting the building. The expanded plaza and dedicated drop-off space significantly improves the functionality of the Opera House entry which attracts large groups of pedestrians at the beginning and end of performances. Under the current situation, the Opera House has difficulty safely accommodating school groups into and out of performances at the opera house due to the hostile pedestrian environment around the building entry.

Bus. We have allowed space for curbside tour bus loading and unloading along the Depot plaza. The space is large enough for cars to pass while a bus is parked alongside the curb. This zone is intended for loading and unloading only; not for bus parking.

Traffic Calming. The design of the circulation system generally calms traffic while allowing through movement. Traffic calming is handled through islands, and 'bump-outs' at pedestrian crossings. Most of the drives accommodate two-way traffic, which helps to calm and slows traffic. One idea for the Depot Square intersection in front of the Depot is to reuse the granite cobbles that will be removed



Left, conceptual plan of loading zone in Merchants Row. Right, example of dedicated loading zone behind shops in Hanover, NH.

from the sub base of Main Street for a decorative and textured surface at this important node. This would also calm traffic and provide an interesting visual amenity that is tied to Barre's history at this location.

Loading. Finally, a centralized loading zone of approximately 230 feet in length is provided in a striped out zone behind the shops at a central location along Merchants Row. This space allows temporary truck parking to unload and deliver merchandise to shops along Merchants Row from a central location.

Parking

There are a total of 290 parking spaces, including 14 handicapped spaces, provided in this plan. Handicapped spaces are provided throughout the parking area at locations near major crossings and destinations. This is a decrease of 93 spaces from the current total of 383 parking spaces. While this sounds like an alarming loss of parking at first blush, parking in Merchants Row is not highly utilized. In their parking utilization study, RSG observed Merchants Row in October 2009 and found a typical average weekday parking space utilization of 37% and a peak utilization of 43%. Allowing for a 150% increase above this observed utilization would yield an average estimated peak demand of 171 spaces. This layout handily accommodates this estimated peak demand with additional spaces as well. The Parking Inventory and Assessment for Merchants Row can be found in Appendix A.

Image and Character

Landscaping. We have provided landscaped medians that organize and define drive aisles but also provide shading and green space to this relentlessly paved area. We also recommend a row of trees between the parking and the bike path. Trees would thrive in this area and prove welcome shading and visual relief. We have responded to concerns of shop owners and the Opera House and not shown too many trees along the sidewalk area and within the plaza. This should be looked at in more detail in final design phases. Due to the southern aspect of the buildings and the paved environment, additional trees carefully placed along the sidewalk and plaza would help create needed shade and result in a more inviting sidewalk environment. There are tree species that have open and 'feathery' habits (e.g., Honey Locust) or are high branching (e.g., American Elms) that can produce shading without blocking business signs.

Light Fixtures. The use of ornamental light fixtures in this area is a cost consideration for the City. It can easily be accommodated, would improve the image of the area, but we don't feel is a critical feature in this location. For lighting, we have assumed that ornamental fixtures (perhaps the Main Street fixture) are used at the focal points of Merchants Row, namely Depot Plaza and Opera Square. We would anticipate improved pedestrian oriented lighting along the sidewalk as well. Overall we would recommend

Above, electronic parking meter station.

that new energy efficient LED lighting fixtures be utilized at Merchants Row to lower the energy costs of lighting the area. We would recommend that the City engage a lighting consultant and look at the photometrics of the area as a part of the final design.

Underground utilities are similarly another cost consideration; it would be nice, add greatly to an improved image for the area, but the cost benefit needs to be weighed by the City. This layout provides the opportunity for the power poles to be consolidated along the rail corridor. Conduit should be laid in the ground as a part of reconstruction of the parking area, so that if undergrounding of utilities is undertaken at some point in the future, demolition of the area would be minimized.

Options for Parking Management

Based on our site assessment and discussions with City officials, the following parking management options should be considered as part of this planning process:

Above, dumpsters attractively concealed along Merchants Row.

- ***Electronic Parking Payment System***: Many municipalities are migrating from individually-metered spaces to electronic parking payment units to simplify maintenance and enforcement, increase revenue (by adjusting rates by time of day or day of year), and decrease visual clutter. Many of the units incorporate solar panels and cellular technology so additional power or communications infrastructure is not needed. There are two primary options for electronic parking payment in surface lots: 1) pay and display and 2) pay by space. Both systems are fairly similar in operation and can be set up to accept payment by cash and credit card and read permits issued by the City.

  - *Pay and Display*: With a pay and display system, the user parks, pays an appropriate amount for their expected duration, receives a receipt card from the unit, and then displays the card on their dashboard. This is the system currently in place behind the Capital Plaza hotel in Montpelier.

  - *Pay by Space*: With a pay by space system, the user parks and notes which numbered space they are in then enters that parking space into the payment unit and pays an appropriate amount for their expected duration.

Alternate Approach to Permitting: It is our understanding that a previous parking permit system allowed parking permit holders to park in any space, including metered spaces.

Sketch view of a possible improved 'gateway' to Main Street.

As long as their parking pass was visible, they did not need to feed the meter. This system would basically allow all spaces to be metered and could increase the potential for parking revenue (by basically increasing the total supply of metered spaces). This system would also help minimize the amount of duplicate parking spaces being provided in the City. One disadvantage of this system is that a permit holder would not be guaranteed a space. However, given the current parking demand in the project area, it would appear that excess capacity would be available at most (if not all) times.

Other Considerations for Merchants Row

There were a few additional considerations that were brought up through the planning process that are worthy of further consideration as the City moves towards implementing improvements along Merchants Row:

Consolidation of Trash Service / Dumpsters: Although business entries onto Merchants Row are at least as busy, in some cases more busy, than Main Street entrances, this area must accommodate typical 'back of the house' operations such as loading and trash accommodation. Currently each business takes care of its own trash. It was suggested that it may be beneficial, and possibly more economical, for merchants to band together and provide for trash storage and pickup as a group. This would allow for dumpsters locations to be consolidated in specific locations. Accommodating the dumpsters in an enclosure (see photo) greatly improves the image of the area. This is an action that should be led by an association of the involved merchants.

Improvements to Mid-Block 'Cut Throughs' to Main Street

The mid-block pedestrian 'cut throughs' to Main Street were often noted for being bleak and generally unattractive components of the downtown pedestrian circulation system. One suggestion was to remove the roof over the walkways to open them to sunlight and the elements. This is worth evaluating. The biggest problem with these spac-

Summary of Project Costs:
Merchants Row Improvements

Project Area	Project Components	Estimated Cost
Depot Square to Granite Street	Roadway and Parking Sidewalks Landscaping Benches and Lighting	$ 533,670
Depot Square to Prospect Street	Roadway and Parking Sidewalks Landscaping Lighting	$ 1,451,000
Depot Plaza	Roadway and Parking Plaza Sidewalks Landscaping Site Furnishings	$ 429,150
Opera Square	Plaza Sidewalks Landscaping Site Furnishings	$ 251,500
Bike Path	Bike Path Fencing Landscaping	$ 250,000
Wayfinding Allowance		$ 75,000
Grand Total All Projects 2010		**$ 2,990,320**

es is the expanse of blank walls. Windows that break up the expanse of blank walls and reveal the activities within the adjoining buildings or display merchandise, would help make these spaces feel more lively and attractive.

Another idea is to provide an attractive entry 'gateway' that marks the passage to Main Street from Merchats Row, as shown in the sketch on the opposite page.

Preliminary Cost Estimate

We have prepared a preliminary estimate of the cost of constructing the Merchants Row public improvements. The cost estimate includes allowances for 'soft costs' including design and engineering, project management, as well as a contingency allowance of 20 percent. We have broken the project into several sub parts to allow phasing or the ability to pursue funding by various entities. The costs are summarized in the chart.

The project costs include both 'hard' costs of demolition and construction, as well as 'soft' costs including design, administrative fees and a contingency.

Appendix A: Parking Inventory and Assessment for Merchants Row

RSG INC.
TRANSPORTATION

MEMORANDUM

To: Carolyn Radisch, ORW
From: David Saladino, PE
Subject: Parking Inventory and Assessment for Merchant's Row
Date: 28 October 2009

This technical memorandum summarizes our parking assessment of the area included within the Merchant's Row project study area in Barre, Vermont. This memorandum includes the following sections:

- Inventory of Existing Parking Spaces and Parking Control Type
- Summary of Average Parking Utilization
- Comparison of Existing vs. Proposed Parking Capacity
- Parking Management Options

Inventory of Existing Parking Spaces and Parking Control Type

We conducted our inventory of parking spaces in the Merchant's Row project study area on 15 October 2009. This inventory included an assessment of the current parking supply, parking control types (metered, private, permit), and parking occupancy at three times during the day (9 AM, 12 PM, 4 PM).

The parking supply assessment found there are 424 total parking spaces available in the study area. Figure 1 on the following page illustrates the distribution of these 424 parking spaces, color-coded by parking control type. As the graphic shows, the parking control type is split roughly equally between private, public, and permit spaces. From a spatial allocation perspective, it can be seen that the private spaces tend to be located closest to the Main Street buildings, permit spaces are located closest to the railroad tracks, and public/metered spaces are located between the two.

The City issues two types of parking permits: 24-hour and daily permits. The 24-hour permits currently cost $200 per year and are typically issued to downtown residents. Of the 28 designated 24-hour permit spaces within the project area, 21 are currently being used.

As Figure 1 shows, 26% of the parking supply (111 spaces) in the project area is reserved exclusively for patrons or employees of individual businesses. These reserved spaces include clustered parking for Chittenden Bank, Bag Ladies Café, and Lenny's Shoe & Apparel, as well as individual spaces immediately behind the Main Street businesses. The 43 spaces allocated to Chittenden Bank and Lenny's Shoe & Apparel are located on private lots. The remaining private spaces are located either within City-owned property or straddling City/private property boundaries.

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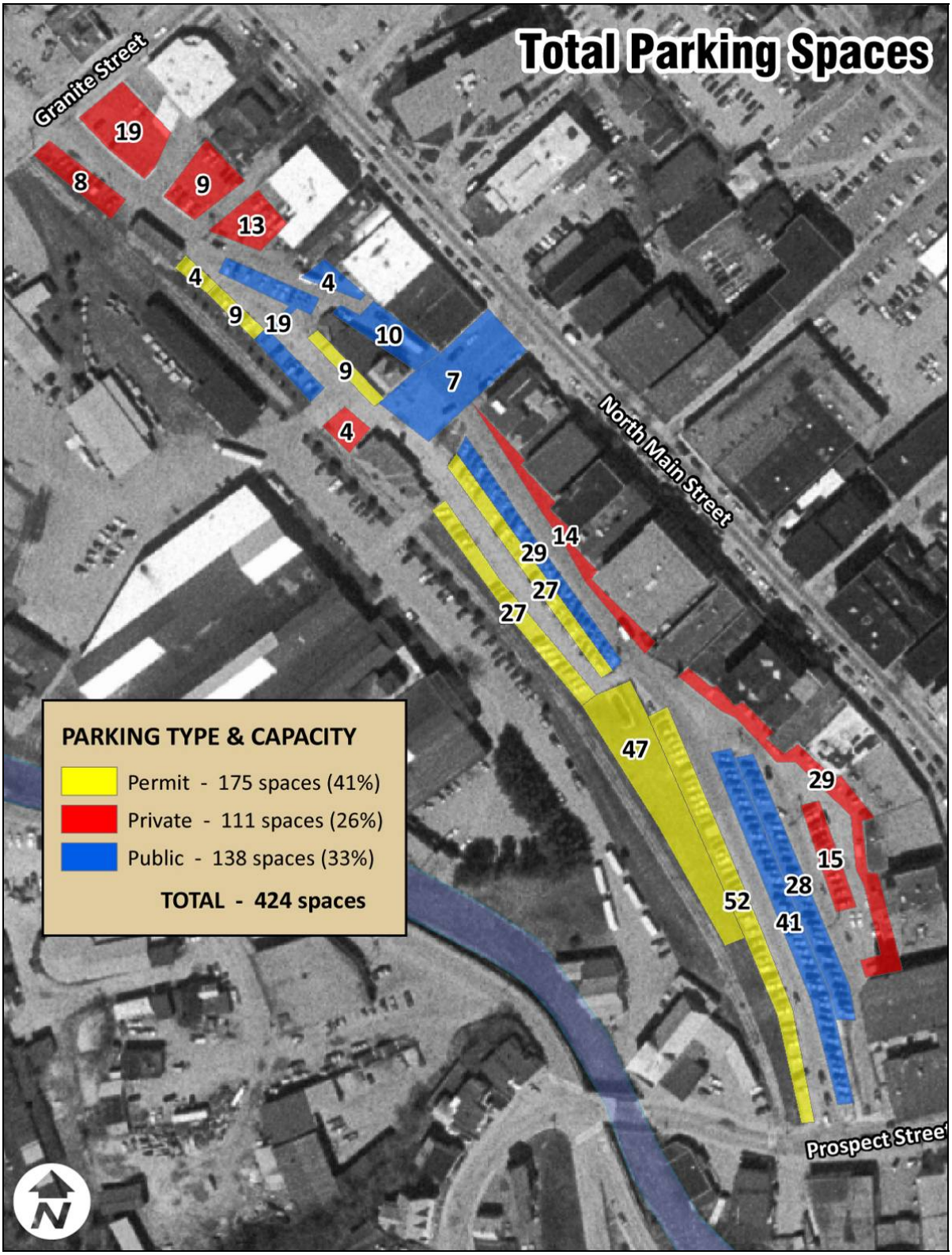
Figure 1: Total Parking Spaces and Capacity



Summary of Average Parking Utilization

To establish a sense of the parking utilization within the study area, we conducted parking utilization counts during a weekday at 9 AM, 12 PM, and 4 PM. Based on this data, we found that the average utilization over a typical weekday was 37%, with the highest utilization occurring during the midday period (41%).

Figure 2: Parking Occupancy by Time of Day

Time Period	# Spaces Occupied	% Occupied
9:00 AM	151	36%
12:00 PM	173	41%
4:00 PM	144	34%

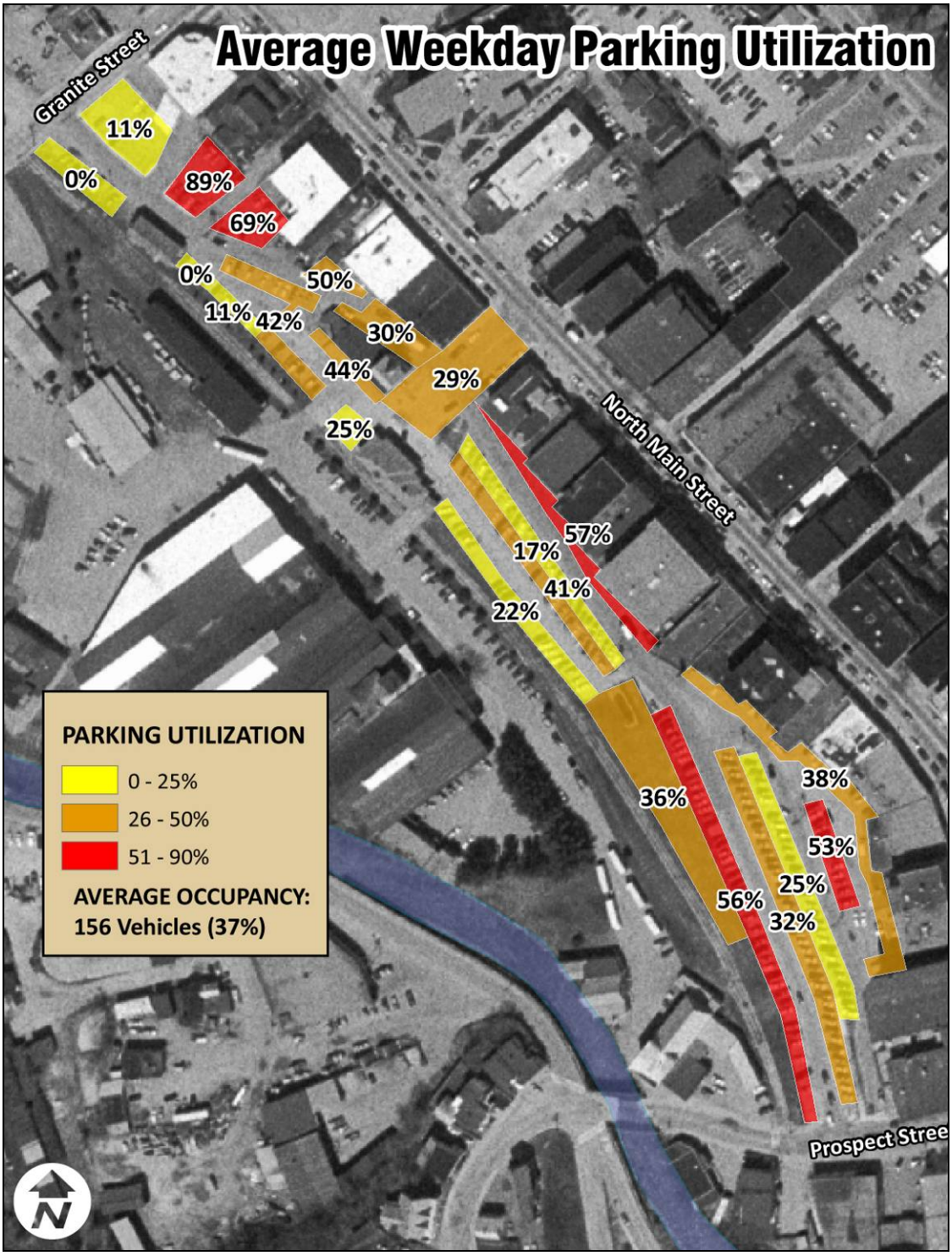
Looking deeper into the data, we find that the highest occupancy rates were found in the private spaces (43%) over the course of the day.

Figure 3: Parking Occupancy by Type of Parking Control

Control	# Spaces Occupied	% Occupied
Private	48	43%
Public	40	29%
Permit	68	39%

Figure 4 on the following page shows the spatial distribution of the average parking utilization observed during the three time periods.

Figure 4: Average Weekday Parking Utilization



Comparison of Existing vs. Proposed Parking Capacity

There are currently two proposed layout options for the project study area. Layout Option 1 provides 269 parking spaces and Option 2 provides 273 parking spaces. The proposed options would impact a total of 375 parking spaces (options do not impact the 49 parking spaces behind Chittenden Bank and Lucia's Italian Restaurant), which would result in a net loss of 106 parking spaces under Option 1 and 102 spaces under Option 2.

However, as the previous graphics have shown, less than 50% of the parking spaces in the study area are used during the course of a typical weekday. Thus, the net loss of parking proposed in the two design options should not adversely impact existing parking operations.

Specifically, Figure 5 below shows the excess parking capacity that would be expected under both design options assuming an average peak demand of 171 vehicles. The average peak demand figure was obtained by increasing the maximum parking occupancy observed in the field for each of the three control types by 150% to account for higher than average conditions. Even under these average peak demand conditions, both options would provide over 35 excess parking spaces.

Figure 5: Parking Occupancy by Type of Parking Control

	# Spaces Provided	Average Peak Demand	Excess Capacity
Option 1	269	234 spaces	35 spaces
Option 2	273	234 spaces	39 spaces

Options for Parking Management

As described previously in this memorandum, the current parking supply is controlled as either private, permit, or public spaces. The private spaces are signed as such, the permit spaces are signed as either daily (6 AM – 6 PM) or 24-hour, and the public spaces are metered individually.

Based on our site assessment and discussions with City officials, the following parking management options should be considered as part of this planning process:

- Electronic Parking Payment System: Many municipalities are migrating from individually-metered spaces to electronic parking payment units to simplify maintenance and enforcement, increase revenue (by adjusting rates by time of day or day of year), and decrease visual clutter. Many of the units incorporate solar panels and cellular technology so additional power or communications infrastructure is not needed. There are two primary options for electronic parking payment in surface lots: 1) pay and display and 2) pay by space. Both systems are fairly similar in operation and can be set up to accept payment by cash and credit card and read permits issued by the City.

  - Pay and Display: With a pay and display system, the user parks, pays an appropriate amount for their expected duration, receives a receipt card from the unit, and then displays the card on their dashboard. This is the system currently in place behind the Capital Plaza hotel in Montpelier.

- Pay by Space: With a pay by space system, the user parks and notes which numbered space they are in then enters that parking space into the payment unit and pays an appropriate amount for their expected duration.

- Alternate Approach to Permitting: It is our understanding that a previous parking permit system allowed parking permit holders to park in any space, including metered spaces. As long as their parking pass was visible, they did not need to feed the meter. This system would basically allow all spaces to be metered and could increase the potential for parking revenue (by basically increasing the total supply of metered spaces). This system would also help minimize the amount of duplicate parking spaces being provided in the City. One disadvantage of this system is that a permit holder would not be guaranteed a space. However, given the current parking demand in the project area, it would appear that excess capacity would be available at most (if not all) times.