

To: Craig D. Peiffer, Urban Planner
City of Harrisburg
Department of Building and Housing Development
10 N. 2nd Street, Suite 206
Harrisburg, PA 17101

From: Bergmann Associates

Date: March 15, 2011

RE: Evaluation of 2053 N. Second Street - Alternative Sunoco Layouts

Introduction

The applicant's objective for this project is to improve the existing Sunoco station located at 2053 N. 2nd Street in the City of Harrisburg, Dauphin County, Pennsylvania. The project site is approximately 0.57 acres in size and contains an outdated convenience store, service station and 4 gasoline dispensers with a canopy. These existing features are proposed to be demolished. Proposed for construction is a new 3,044 square-foot "A-Plus" convenience store, 4 gasoline dispensers and 9 parking spaces. The service station use will be removed.

As discussed in the HARB meeting of February 23rd, 2011, the intent of this memo is to further document the advantages and disadvantages of the two alternative site layouts for the redevelopment of this site based on Mr. Peiffer's recommendations provided via email. This analysis was done by generating plans based upon these sketches, and redefining the advantages and disadvantages of these layouts. In addition we looked at additional layouts and developed an additional layout showing the building facing Maclay Street. Without bias, each layout was examined to assess the safety of the patrons, congestion of the site, access from the three road frontages, Sunoco operations, and adherence to City ordinances. Each of these layouts is attached in the appendix and the evaluation of each alternative is summarized in the following:

Original Proposal – Drawing Exhibit 1

The original layout is most similar to the existing site layout, with the convenience store set towards the east of the property and the dispensers and canopy set to the west aligned parallel to N Second Street. There is space for nine (9) parking spaces to be positioned in front of the entrance to the store. The site is accessible via N. Second Street and Maclay Street. This is the current circulation pattern which is familiar to local patrons. By positioning the store on the eastern property line (along Penn Street) it allows the circulation within the site to be greatly improved. A traffic study was prepared that analyzed this layout and it was determined that the proposed development will not adversely impact the surrounding roadway network and safe and efficient access will be provided for the site.

From Sunoco's experience this site layout is deemed to be the most efficient and safest for patrons. The cashier at the entrance of the building will have visibility to all of the dispensers from their post which is required per state law. Also, the cashier is not only able to view all of the dispensers but can also observe patrons who enter and exit the site via the main entrances as well as most of the parking spaces, which located in front of the store. Crime inside the store is greatly discouraged given the ability of pedestrians and police to see into the store from N. Second Street and from westbound on Maclay Street. With this layout, Sunoco delivery trucks can safely maneuver and properly off load at the underground tanks which will remain at the current location.

From a Sunoco operations standpoint this site layout is the most desirable. According to Sunoco records, 75% - 80% of their business is generated from the gas dispensers. This layout has the canopy and dispensers visible to motorists traveling either direction on N. Second Street and Maclay Street. The layout also provides desirable walking distances, under 100', from the front door to the farthest parking space and the farthest fueling position (50' and 82' respectively). The proposed layout will eliminate access to the site from Penn Street which is essentially a side alley and not the preferred access road for vehicles to enter/exit the site.



This proposed layout does include additional landscaping south of the proposed building and north of the refuse area. Also, evergreen plantings will be added along the southern property line to aid in screening from the neighboring property. A 6' high wooden fence with gates is proposed along the eastern property line. This will help enclose this area and provide additional buffering and security behind the store. Additional green space will be added to the site in the proposed condition.

It is important to emphasize the safety of this layout; in that, the cashier can see all dispensers, the traffic circulation is familiar to customers, interior vehicular traffic is visible from the roadways and the inside of the store is visible from two (2) major frontages.

Alternative #1 – Exhibit 2

This alternative layout uses one of the two sketches provided by Mr. Peiffer, but revises the N Second Street area to center one entrance, for tractor trailer access. In order to properly access the existing tanks under any layout, an entrance on N. Second Street is required. This layout sets the convenience store in the southwest corner of the property with the canopy and dispensers set parallel to Penn Street. Six (6) parking spaces can be installed directly in front of the store, with three (3) additional spaces being proposed in the northwest corner area of the site. The site is accessible via three entrances and exits, one each located on N. Second Street, Maclay Street, and Penn Street.

This layout is not feasible for many reasons, starting with the fact that with this layout, there is no realistic place for a dumpster, or storage shed necessary for the flood panels that will be required for this site. A minimum of 8 parking spaces are required per code, so removing enough spaces for the dumpster and shed would require a zoning variance. Furthermore, the only practical location would be at the intersection of N Second Street and Maclay Street which neither Sunoco or the City would find appropriate. As a result this layout cannot support the redevelopment of this site in a manner that Sunoco is willing to invest in the redevelopment.

Also, from Sunoco's operation standpoint this site layout is deemed to be unsafe for patrons for the following reasons. The cashier at the entrance of the building should be able to see the dispensers from their post; which they cannot do with this layout. As a result, a camera system would need to be installed. While this can be done, it is not preferred. Also, the cashier cannot see who enters and exits the site from the Penn Street entrance or if anyone is obstructing the entrance. Regarding Penn Street, this road is very narrow and is unlikely to be able to handle the volume of customer traffic entering and exiting the Sunoco site.

Driver safety is another issue with this layout. The parking spaces along the northwest corner would require patrons to walk through the parking lot area and across the N. Second Street entrance, again something not preferred. These spaces would be mostly blocked during any truck offloading period.

This layout would also require that the existing landscaping along N. Second Street be removed, and the bus stop relocated. Furthermore, due to the close location to N. Second Street area, the building elevation would need to be lowered by at least one foot, to allow for proper slopes on the parking lot and access areas. This would require additional relief from the floodplain provisions.

The building is also situated in a manner that blocks visibility of the dispensers from potential patrons traveling northbound on N. Second Street. The patrons will only see the dispensers when they reach the intersection or have passed it. The layout also has greater than desirable maximum walking distances from the front door to the farthest parking space and farthest pump. This walking distance to the convenience store also poses another safety risk, as patrons would have to walk across the maneuvering area of other customers in order to reach vehicles parked at the north side of the site. In addition, Sunoco delivery trucks filling the storage tanks will partially block patron access to the site.

Alternative #2 – Exhibit 3

This alternative layout mirrors the original proposal, where the rear of the store faces N. Second Street, and the canopy with dispensers is parallel to Penn Street. The refuse area and shed enclosure is proposed to be located along the southern property line. There is space for six (6) parking spaces at the front of the store. Two (2) more spaces are shown to the north of the store. The site is accessible via each frontage. It is important to



note that the rear of the store consists of utility space and food storage areas. Therefore, proposing a customer entrance at the rear of the store is not feasible. The doors that are shown in the rear of the store are doors that allow access to the electrical utility area. Also, adding windows to the rear of the store would expose storage and utility space that would not be appealing to passers-by. This would be the view from across the street from the Governor's Mansion. Despite a faux mansard roof, roof top units would be visible from the mansion. Furthermore, this layout would force the relocation of at least one of the underground fuel tanks, in order to fit the building into the site. As previously discussed, tank relocation is not a preferred option, and on this site, relocating the tanks does not provide any benefits. There is no alternative location for the tanks that would provide safe access without negatively impacting the site.

From an operational standpoint, this site layout is deemed to be inaccessible for delivery trucks. In order for the delivery trucks to refill the existing tanks, they need to align themselves so that their passenger side of the truck is aligned with the fill caps. This is not practical with this layout. To get the truck in position to offload, it would need to traverse across the full front of the store, squeezing between the parking spaces and the canopy, pulling out onto Maclay Street, and then backing up into the two parking spaces onsite to be in position to offload the fuel. This is far too many dangerous maneuvers for each trip to consider this layout as feasible.

The cashier located at the entrance of the building must be able to see the dispensers from their post; which they can. However, crime prevention inside the store is greatly reduced since pedestrians and police passing by cannot see into the store or site except from westbound traffic on Maclay and from Penn Street (which is a minor 12' wide one way street). Also, while the cashier is able to view all of the dispensers from his post he cannot see who enters and exits the site from N. Second Street (one of the main entrances) until the car enters in front of the store.

From Sunoco's operations standpoint this site layout is deemed to be undesirable for other reasons also. This layout places the building directly in front of the canopy and dispensers, significantly reducing dispenser visibility from the major street, N. Second Street. This arrangement tends to discourage patrons as they are unable to quickly assess if the dispensers are occupied and determine if it is convenient to stop at that time. It also distracts the passing patron who now has a much harder time to view the dispensers and available parking which is obstructed by the convenience store. The two (2) spaces along the north side also pose a safety and traffic risk, where patrons would have to back up their vehicle a significant distance before being able to enter the drive aisle. This layout also forces the dumpster and shed to be located away from the building, and access to them would be by crossing the main entrance along N Second Street. Vehicle traffic circulation is also very tight, and onsite vehicle blockages for trucks and cars would be extremely frequent.

Alternative #3 – Exhibit 4

As part of this evaluation of sketches, Sunoco asked that Bergmann Associates review additional alternate layouts. Most of the layouts either did not work or were slight modifications to those presented here. Alternate 3, Exhibit 4 was developed as a potential layout with the building facing Maclay Street, and the canopy being set perpendicular to N Second Street. The building is located along the Southern property line, facing Maclay Street. The layout allows for 8 parking spaces, but none of them are in front of the store. There is more landscaping on this layout, and traffic patterns for vehicular flows appear to be adequate. However, the spaces not in front of the store are a large concern to Sunoco, as noted previously. There is no feasible way to place the parking in front of the store under any conditions, with the building facing Maclay Street. This layout also places the dumpster area away from the store, which is also not a preferred Sunoco option.

This layout does provide the canopy in front of the store, visible in all directions of Maclay Street and N Second Avenue. One access along N Second Street would be reduced, and reducing a Maclay Street access, would assist in restricting traffic flows and patterns. The impact on the Governor's Mansion is slightly reduced.

If this property was 20 feet deeper, such that parking for this building could be in front of the store, this would be a viable alternate layout. However, it is clearly shown this is not feasible, and for Sunoco to invest in the redevelopment of this site, parking along the front of the building is an absolute requirement.



Conclusion

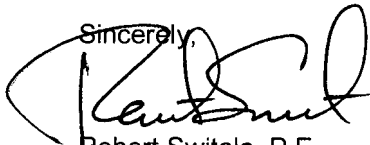
The evaluation of the various alternative layouts presented highlights various risks involved with the operation and layout of a fueling station. The issues of safety are as follows:

- The necessity of the cashier to be able to see the gas dispensers
- The necessity of the cashier to be able to see the entrance and exit
- The necessity of the cashier to be able to see the extents of the parking area
- The necessity of the fueling trucks to properly and safely access the existing tank location.
- The visibility of the store front to the adjacent roadway, and dispensers by both potential patrons and passerby's
- The potential conflict between consumers at the gas dispensers and customers parking at the convenience store
- The potential conflict between consumers at the gas dispensers and customers walking to the convenience store
- The possibility of a queue at the dispensers interrupting the flow of traffic to the entrance and adjacent roadway
- The need to not relocate the existing tanks onsite just to relocate them to a place they are no more accessible to.
- The Sunoco safety considerations for having the parking spaces at the front of the store.

The original layout is cognizant to Sunoco's many years of research and development, including trial and error, in which the originally proposed layout has proven to be the most beneficial to the site and the surrounding area in regards to safety and congestion. This layout is the safest for patrons, pedestrians, and passing motorists. It also provides landscaping that can be manipulated per Township input to conform to the surrounding neighborhood. We understand the intention of Mr. Peiffer's alternative layouts but for reasons of safety, the original layout should be considered the most practical layout proposed. Sunoco is willing to compromise on the building material and look of the building, and lighting concerns, discussed in the February 23rd HARB meeting. As evidence of this the building elevations have been revised with a brick finish that is consistent with the Governor's Mansion. In addition, a faux Mansard roof has been added. A rendering of the enhanced building is provided with this submission. The original layout is the only viable layout that Sunoco is willing to invest significant money for the redevelopment and major improvements at this site.

Please review the above determinations by Sunoco, for review with the HARB board on April 4th, 2011. Should you have any questions, please call me at 610-783-1420, Ext 812, or email me at rswitala@bergmannpc.com.

Sincerely,



Robert Switala, P.E.
Project Manager

Cc: Clayton McCane, Sunoco
Jeffrey Bauer, Sunoco

