



# **City of Grand Island**

**Tuesday, March 01, 2005  
Study Session/Special Mtg**

## **Item -1**

**Presentation of Site & Needs Study for the Fire Department**

**Staff Contact: Jim Rowell**

# **Council Agenda Memo**

**From:** Fire Chief Jim Rowell  
**Meeting:** March 1, 2005  
**Subject:** Fire Station #1 and Training Center Site and Needs Study  
**Item #'s:** 1  
**Presenter(s):** RDG Group

## **Background**

Following a City Council decision to move forward on replacement of Fire Station #1, a fire Training Center and other public facilities, a public vote was held to approve the sales tax as support for funding these facilities. Following this vote departments were directed to proceed with the identified projects.

The fire department staff presented a proposal identifying a location west of Locust Street to be the new station location; and a site north of Capital Avenue for the training center. Following public comment the Council approved the establishment of a committee and the hiring of a consultant to conduct a study to determine the best options for replacement of the fire station and the location for a fire training center.

## **Discussion**

The presentation will provide the results of the consultants and committees effort to provide viable options for consideration by City Council. The report is the culmination of months of process and work, gathering the information, conducting meetings and reviewing the work as it progressed.

The consultants provided expertise from several areas including architecture, community planning, fire station design, training center design and fire department response planning. These areas were covered by the three companies composing the consulting group RDG, BKV, and ESCI. RDG was primary provider of the report and coordinated the efforts of the group.

The committee included Fire Department staff, City Councilmember Bob Meyer, and a member of the public Mr. Duane Donaldson. The committee's first task was to determine the best response to the request for proposals for the consultants and provide that to City Council for

approval. Following the consultant selection and Council approval several public meetings were held with the committee and consultants over a period of three months.

## **Conclusion**

The report will provide the results of the consultants work and give the Council information on which to base discussion and ultimately determine the best solution for the replacement of Fire Station #1 and the location of the Fire Training Center. This was a site and needs study and will provide information not only about location, but the size and space needs for both the training center and the fire station. The consultants will present the information using PowerPoint and answer questions as needed. Fire Department staff will also be available for questions.

This item is presented to the City Council in a Study Session to allow for any questions to be answered and to create a greater understanding of the issue at hand.

It is the intent of City Administration to bring this issue to a future council meeting for the site recommendation approval.

# Site and Needs Study for the Grand Island Fire Department Grand Island, NE





**GRAND ISLAND FIRE DEPARTMENT**  
Site and Needs Study

Prepared by



in association with



for the  
Grand Island Fire Department  
Grand Island, Nebraska

February 2005

02.25.05

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## EXECUTIVE SUMMARY

The City of Grand Island engaged RDG Planning & Design of Omaha, Nebraska, and its associates from ESCI (Wilsonville, Oregon) and BKV Group (Minneapolis, Minnesota) to provide an independent report regarding the planned site acquisition, design, and construction of a new fire station and fire-training center.

The report that follows includes a fire-station and training-center location analysis. The training-center requires preparation of a business plan as well.

Through charrette workshops and other means, the RDG team:

- Collected data from the fire department.
- Interviewed representatives of the fire department, city administration, city planning, the community, and other interested parties.
- Toured the city of Grand Island.
- Toured existing fire stations in Grand Island.
- Developed a preliminary program for the fire station and training center.
- Recommended strategies for the fire station and training center, taking into account (a) GIS modeling, (b) Grand Island's comprehensive plan, (c) growth projections, (d) a windshield survey of the city and its immediate surroundings, and (e) the data gathered through charrettes and interviews.
- Translated the programs into sample graphic footprint block diagrams and tested them on potential sites.
- Analyzed each potential site according to its strengths, weaknesses, and cost impact.

Drawing on the process described above and on team members' expertise in city planning and fire-facility planning, the team developed the report that follows. This report is intended to help decision-makers in their deliberations on the planned headquarters fire station and training center.

The rest of this executive summary and the report itself address the fire station and the training center separately. Fire-station strategies are identified by letter and training-site strategies by number. Depending on the site selected, the two programs may combine as a single project at a single site.

## Fire Station

In the long run, upon full development and buildout of its response territory and through continued use of its existing location deployment scheme, the Grand Island Fire Department will be able to maintain the city's response-time objective—six minutes or less—for first-due company arrival. After anticipated real-estate development, response times could increase by about 3 percent.



<b>Performance Projection on Future Development and Service Demand</b>		
<b>Deployment Strategy</b>	<b>Percent of Service Demand &lt;6:00</b>	<b>Percent of Road Segments &lt;6:00</b>
Status Quo at Full Future Buildout	92%	73%
Strategy "A"	93%	82%
Strategy "B"	91%	82%
Strategy "C"	93%	82%
Strategy "D"	92%	85%
Strategy "E"	90%	81%
Strategy "F"	94%	84%

### Deployment Strategy Performance Projection Summary

As indicated by the table above, Site Strategy F is projected to offer the greatest improvement over continued use of the current deployment locations.

Site Strategies A and C could offer slight performance improvement, though all six deployment site strategies are projected to vary only a little in performance. Accordingly, the city could adopt any one of the site strategies and maintain service levels; that is, each site strategy would accommodate a first-unit arrival of six minutes or less.

Because each site strategy meets the fire department's 90-percent response-time standard, the fire department—after reviewing an early draft of this report—concluded that Site Strategy D could be eliminated as an option: any growth in service need could be accommodated on the airport. Thus Site Strategy D would not be reviewed as part of the architectural analysis.

Site Strategy C was seen as having operational limitations for response times when the Heartland Events Center was in use. Site Strategy C *was* included in the architectural review, however, since response-time delays would occur primarily during events, and since these delays could be alleviated through traffic planning, traffic-control technology, and public/private involvement.

Thus, the team evaluated Site Strategies A, B, C, E, and F. Because of the existing coverage percentages, ESCI determined that the station should be located within one-quarter mile of the intersections recommended in the operational analysis.

The RDG team proceeded to identify several potential sites within the recommended location envelope. We found that:

- Site Strategies B, C, E, and F have no architectural limitations that would eliminate them from consideration.
- Site F would require the city to use Lyons Park for the proposed Station 2.
- Site Strategies A and E would involve site-acquisition costs.
- Site Strategy C has operational limitations.

As part of the review of site locations, we divided the fire station program into two components: administration and operations. If administration could be located at the training center or another facility, then the team could consider smaller sites for the fire station, making site acquisition less of a hurdle.

*Based on site reviews, strengths, weaknesses, and costs, we recommend that Site Strategy F be implemented for the fire station.*

## Training Center

Training-center programming was done in the same way as that for the fire station, though operational issues played a smaller role. Response times for potential training center sites were considered. Business planning for the training center, however, should be completed before any location is selected.

The principal factors in training-center location appear to be operational and business models. Answers to the following questions would be determined by the business plan procedures. Without these answers it is impossible to program the training center in detail for its use as a regional or state fire-training asset or to determine its cost.

1. How many students would use the training center?
2. How many classes would be held?
3. How many and what types of departments would use the training center?
4. How would the Nebraska Fire Marshal and other interested entities (including educational institutions) use the training center?
5. How would training be funded?
6. How would funding influence the number of classrooms and training props?
7. How would the training center be operated (for example, by a facility manager)?

This information was not available to the design team and thus is not a factor in this report. Programming was based on assumptions made by the design team and on information provided by the Grand Island Fire Department. Accordingly, the recommended square footage is based on the fire departments stated needs and will be impacted once a business plan is completed.

For example, our programming calls for three classrooms in addition to the proposed training room in the new fire station. If our assumptions are incorrect and the training center is instead programmed to accommodate only the Grand Island Fire Department, one additional classroom would be sufficient, and that classroom could be accommodated in the College Park facility (per a discussion with College Park's executive director); the two additional classrooms might never be used.



All potential sites meet the architectural and planning criteria. The team ranked potential training center sites based on the following criteria:

- Cost of land
- Impact on neighbors
- Response time/depth of coverage during training
- Impact of prevailing winds
- Availability of infrastructure
- Ability to co-locate the fire station
- Ability to co-locate fire department administration
- Access to the interstate
- Availability of existing teaching infrastructure (classrooms)
- Availability of existing high bay
- Availability of EVOC
- Capital cost of facilities
- Potential of site to allow growth
- Willingness of site owner to sell or allow use of property

Based on these factors, the site's ability to accommodate the architectural program, and input from property owners, the team has ranked potential sites as follows:

1. Site #1, land adjacent to Central Community College and College Park
2. Site #3, land adjacent to the proposed law enforcement center
3. Site #4, the northern farm property along Capital Avenue E
4. Site #2, land available at Fonner Park

*This study recommends that training center site #1 be implemented in conjunction with fire station Site Strategy F.*



02



## Introduction

## INTRODUCTION

RDG Planning & Design was retained to help the City of Grand Island determine locations for the planned headquarters station and fire training center. The city requested a fair and independent review of its current proposed sites and welcomed documentation of sites not proposed as they would relate to the city's future expansion and its current emergency-services coverage. Recent annexations have included the regional airport.

Grand Island covers 21 square miles with a population of 44,000. The city is served by four fire stations. The fire department employs 24 paramedics and 39 EMT-basics for a total of 63, on a three-platoon system, plus 6 administrative staff members. In 2003 the department responded to 2,565 calls, most of which were medical assists.

Emergency Medical Services comprise two front-line ambulances staffed with two paramedics each. Grand Island has four reserve ambulances staffed with a combination of paramedics and EMT-B's. Ambulance service is contracted with the county for transports and covers multiple counties in central Nebraska.

Fire suppression is limited to the city limits. Grand Island is in a Mutual Aid District and responds with appropriate apparatus when requested. The hazmat team is regional and covers central Nebraska.

Station #1 is responsible for structural firefighting and also supports the airport in ARFF emergencies.

Station #2 houses technical rescue.

Station #3 houses extrication.

Station #4 houses the hazmat assets.

The following items are addressed in this report:

### Fire Station

- o Consideration of response times
- o ISO consideration
- o Deployment of resources
- o Apparatus
- o NFPA 1710, 2 in 2 out response
- o Coverage in depth
- o Essential response force
- o Future growth and development
- o Condition of existing Fire Station 1
- o Ability of sites to accommodate building program
- o Adjacency diagrams
- o Site-planning diagrams

## Fire Training Center

- o Appropriate facility program
- o Consideration of response times
- o Adjacency diagrams
- o Site-planning diagrams
- o Impact on neighbors
- o Ability to co-locate other facilities
- o Ability of the sites to accommodate the training program
- o Cost of the facility

The programs were developed to comply with typical industry standards for fire stations and training facilities.

Fire department personnel to be located at these two facilities are currently housed at City Hall, Station #1 and Station #2.

The fire department had proposed replacing Station #1 near fire station Site Strategy A. The team agreed that it was a strong location and should be included in this report. We understand that there has been community resistance to this site, however, as well as encouragement to use land at Fonner Park, which may entail little or no cost. These factors were considered in our review of the proposed strategies.

This report will outline six site strategies for replacing Station #1 and four site strategies for locating the training center. The report also considers how the facilities would fit on the potential fire-station and training sites. Several specialized spaces will require special design attention, including a training tower, an emergency-vehicle operations course, water supply, and a rescue pond.

The nature of the fire department's work demands continuity and unhindered access to the community as well as academic and practical training facilities. Planning and construction considerations center on the need for an environment that promotes functionality, responsiveness, and good training. Currently, the Grand Island Fire Department does not have physical resources conducive to good training.

Acknowledgements

## **Grand Island Fire Department**

Chief	Jim Rowel
Administrative Assistant	Chris Hoffman
Division Chiefs	Fred Hotz
	Troy Hughes
	Terry Leslie
	Curt Rohling
Committee Member	Duane Donaldson
	Bob Meyer

## **City of Grand Island**

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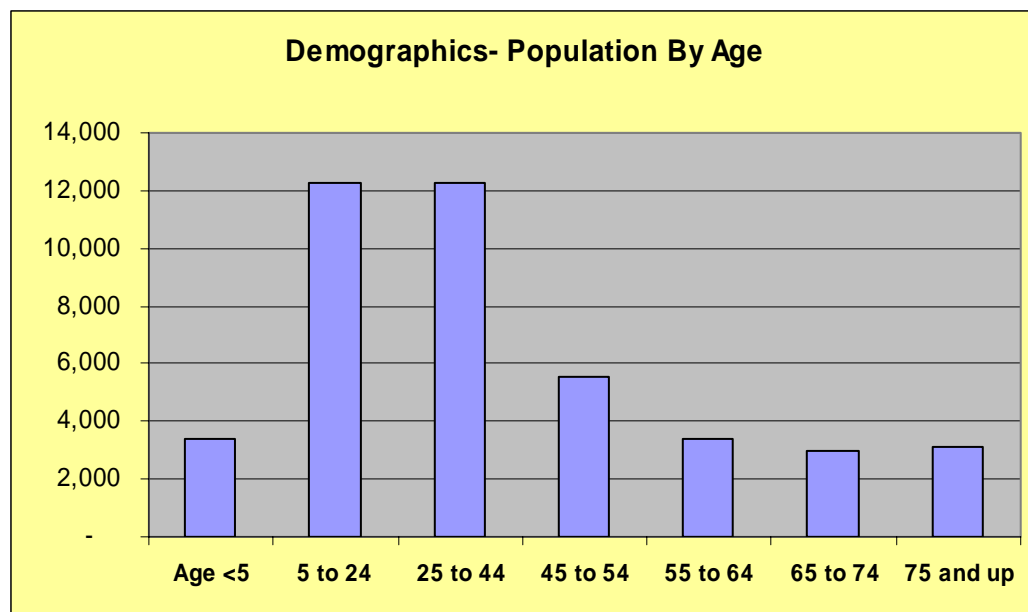
## POPULATION AND COMMUNITY RISK

### Current Population Information

The population of Grand Island was 42,940 residents in the 2000 U.S. Census. This population figures represented a moderate 9% increase over the 1990 Census, when the population of Grand Island was 39,386, and slows the trend of the 1980's when the population increased by over 18%.

The following figures provide some general demographic information on population and housing for the City of Grand Island.

**Figure 1: Grand Island Population By Age**

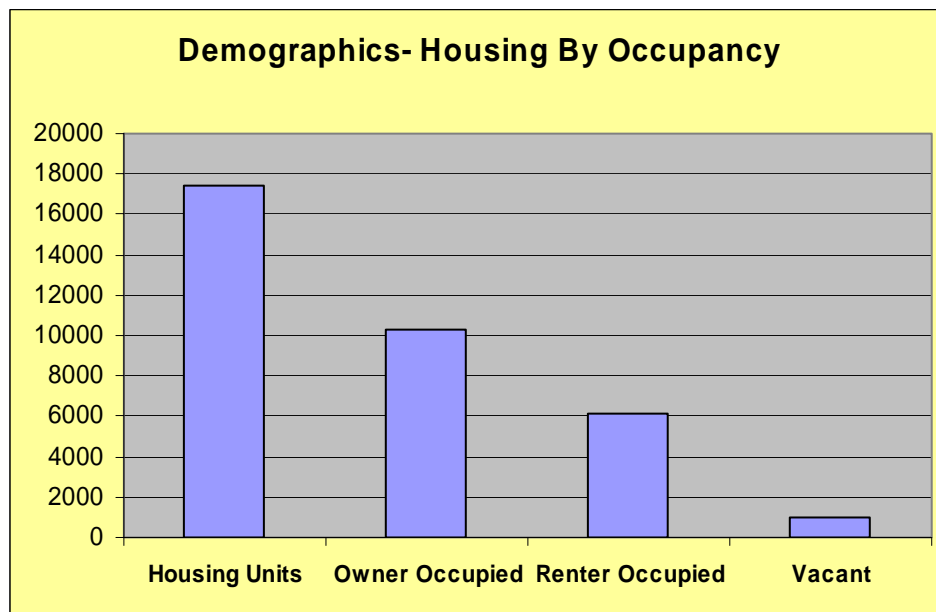


Selected Demographic Information- City of Grand Island- 1990 to 2000								
	Total Pop	Age <5	5 to 24	25 to 44	45 to 54	55 to 64	65 to 74	75 and up
2000	42,940	3,369	12,285	12,295	5,554	3,364	2,946	3,127
1990	39,386	3,086	11,473	12,264	3,493	3,306	3,086	2,678
change	9%	9%	7%	0%	59%	2%	-5%	17%

As can be seen from the figure, 14% of the population is 65 years of age or older, representing a significant target age group for increased service demand in emergency medical incidents. When analyzing trends, this target age group has increased by 5% from 1990 levels. At the same time, the age group under 5 years of

age, also widely recognized as a significant risk group in fire and emergency medical incidents, has increased by 8% since 1990.

**Figure 2: Grand Island Housing By Occupancy**



Selected Housing Information- City of Grand Island- 1990 to 2000				
	Housing Units	Owner Occupied	Renter Occupied	Vacant
2000	17421	10307	6119	995
1990	15855	9270	5974	611
change	10%	11%	2%	63%

As can be seen from the above figures, Grand Island has a significant number of renter-occupied housing units. Statistics often show a higher than average service demand for emergency services in communities with high rates of rental housing.

From the demographic information reviewed here, it can be projected that Grand Island may experience a slightly higher demand for emergency services than other communities of its size.

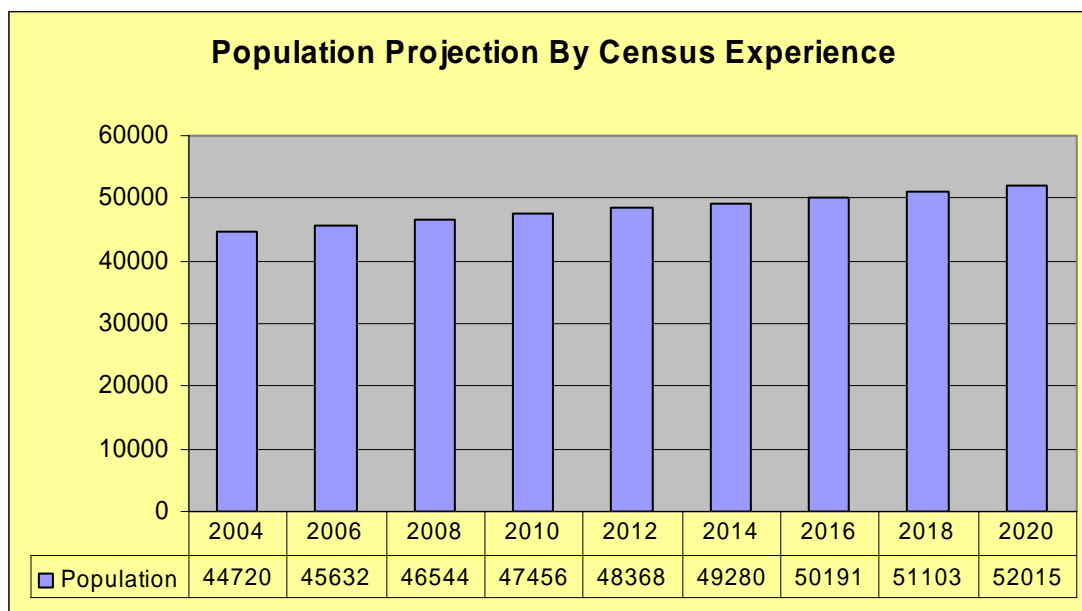
### **Census-based Growth Projections**

As indicated earlier in this section, the population of Grand Island has grown by about 9% in the last decade. In developing forecasts for population growth, we typically

develop a forecast based on several decades of census experience. We have chosen to use the growth rate for the previous three decades, along with the 2003 Census Bureau estimate of population, as the basis for this population forecast, and project another 11% increase in the coming decade.

Were this projected population increase to occur in a fairly even fashion, the resulting population forecast would appear as follows.

**Figure 3: Census-based Population Forecast**



The population projection provided in this chart reflects changes in resident (permanent) population only. It should also be anticipated that additional growth in transient (mostly daytime) population can be expected as expansion in the City's regional commerce develops. Developments such as "big-box" retail, regional shopping centers, and regional entertainment facilities tend to draw transient population from a larger area than just the City of Grand Island.

## **Community Risk Analysis**

### ***Fire Protection Risk Factors***

While there are many considerations that can be assessed when evaluating a community's fire protection risks, the issues can be narrowed into two major



categories. How likely is it that a fire will occur within a given area and how much impact will the fire have if it does occur? The geographic community risk analysis involves the answers to both of these questions.

The first phase of the fire protection risk analysis involves statistical analysis of the risk of fire occurrence. The second involves an analysis of the consequences, or community impact, of a fire if it does occur.

In a community with stable growth, this likelihood of fire occurrence is reasonably tracked through an analysis of fire incident experience. In the absence of significant physical or cultural change, such as major factory closings or civil unrest, the analysis of fire experience yields a fair insight into the likelihood that a fire will occur within a given time period and within a given area. This fire incident experience analysis can be conducted on a regular, annual basis by the fire department.

How much impact a fire is likely to have on a community if it does occur is a factor involving more prediction than experience? For instance, a fire in a vacant garage has little overall impact on the economic welfare of a community while a fire in the primary facility of a city's major employer can be devastating. Even if an analysis of fire experience shows both are equally likely to occur, one fire carries far more dire consequences than the other. A complete community fire protection risk analysis must involve some process of identifying the areas within the community where a fire will have greatest negative impact.

### ***Consequence Factors***

The consequence evaluation in our community fire risk analysis takes into account several major factors in an effort to geographically identify those areas of the community where fire is likely to have greatest impact. During our community evaluation, these consequence factors are assessed and utilized in placing structures into risk categories that carry numerical weight in the overall risk analysis formula.

➤ **Life Risk:**

Structures within a given community that present a significant risk for large



loss of life are assessed a higher risk score, despite what may appear to be a smaller size. As an example, even a relatively small apartment structure with multiple families will assess as a higher risk than a comparatively large single-family dwelling. Hotels or high-rise occupancies will assess as higher risks than a commercial or light industrial occupancy. Structures used to house or assemble high-risk populations, such as elderly or disabled persons, will also assess at high risk. In general, the consequences of fire incidents in such structures can be a significant loss of life and is weighted accordingly in the risk analysis.

➤ **Economic Impact:**

Even though the destruction of a particular property may not result in any loss of life, the impact on a community can be devastating if it has a strong effect on the economy. Loss of employment, decreased taxable value, reduction or losses of associated service industry are all examples of the negative economic impact that fire can have on a community. However, economic impact of a fire depends on the type, use, and size of the structure involved. Even total destruction of a single-family dwelling will have little overall impact on a community's economy, no matter how large the house. Likewise, loss of a single commercial entity, such as a restaurant or auto repair shop, may have an economic impact that is both temporary and limited to the local neighborhood. Loss of significant industrial facility or manufacturer, however, can cripple an entire community's economy for months or even years. The predictable economic impact, therefore, is also considered when placing structures into risk categories in the analysis.

➤ **Resource Demand:**

The outcome of a fire incident in comparison with the resources available is somewhat predictable. For instance, a study by the National Fire Protection Association on residential structure fires from 1994 to 1998 indicated that fatalities and dollar loss were over 85% lower in those incidents where the fire was contained to the room of origin. Doing so requires the proper number of

firefighters and resources to arrive on the incident quickly enough to effectively deploy and contain the fire in its early stages. An ineffective number of resources or a later arrival would permit the fire to spread beyond the room of origin with predictable results. For this reason, we evaluate the approximate number of firefighters and engine companies necessary to rapidly and effectively contain a fire within given structures. The structures are generally categorized within the medium, high, or maximum range for needed resources in accordance with the resource table utilized in the International Fire Service Accreditation Congress (IFSAC) model. The quantity and density of each category within given geographical areas (in this case using zoning classes) are utilized within the overall risk formula.

### ***Methodology***

Our geographic community risk analysis begins with a basic review of the land use classifications for the area studied. Future land use classifications are utilized because they are an existing regulated classification that typically involves the type, use, size, and density of structures within a given geographical boundary. As indicated earlier, these factors weigh heavily in the evaluation of both the likelihood of fire occurrence and the anticipated impact of a fire incident. By utilizing the land use classes, we take advantage of existing classifications that have already been defined and involve these factors.

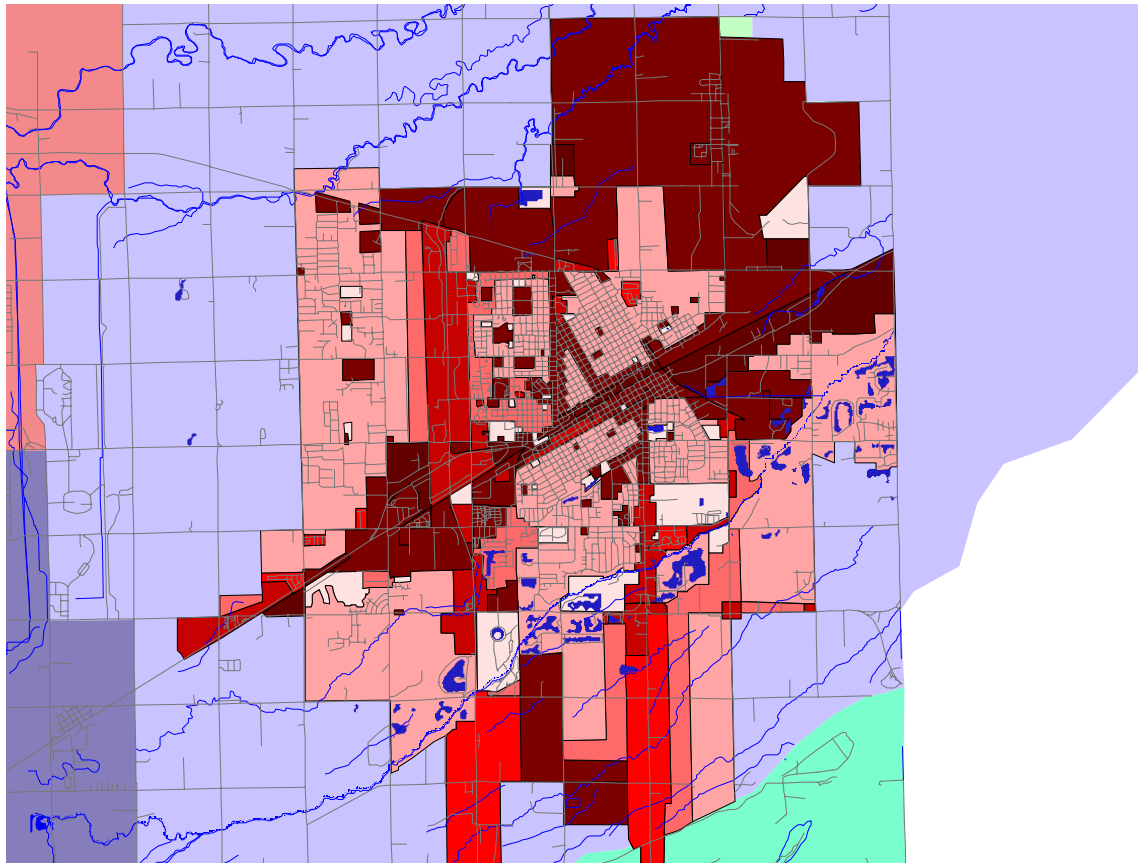
Each community, however, differs slightly in the specifications for structure size, use, and density from class to class in their future land use plan. Therefore, we conduct a basic review of each land use classification in areas already developed for purposes of establishing a standard risk-density factor that is based on true counts of structures within each class. This process is conducted by actually driving through, street-by-street, representative areas of the various land use classes and conducting a “windshield assessment” of structure type, use, and risk category.

These physical counts are translated into the community risk assessment using mathematical formulas and geographic information systems software (GIS). A

mathematical formula is utilized that considers the number and density of structures as categorized by potential community impact, consequence factors, and resource demand. In the next step, geographic information systems (GIS) software is used to determine the precise size of the sample areas evaluated. The total risk score of each area is divided by the size of the sample area in acres to arrive at the risk density factor. In most cases, several sample areas of each land use class are used and then averaged to increase dependability of the results. This risk density factor can be used for comparison purposes when evaluating the overall fire risk within the community by each land use class.

A graphical representation of this risk analysis can then be derived from the numerical risk factor. The figure below shows each future land use classification from the community's Comprehensive Plan with colored shading that corresponds to the relative fire risk/impact in comparison with the overall community. Areas are shaded in progressive depths of red color to indicate relative fire risk/impact. Again, it should be remembered that the risk ratings shown are derived using the *future* land use classifications. This means that the relative risk of areas not yet developed are shown in the shade of their future intended use, not their current use.

**Figure 4: Community Fire Impact Risk Assessment Map**



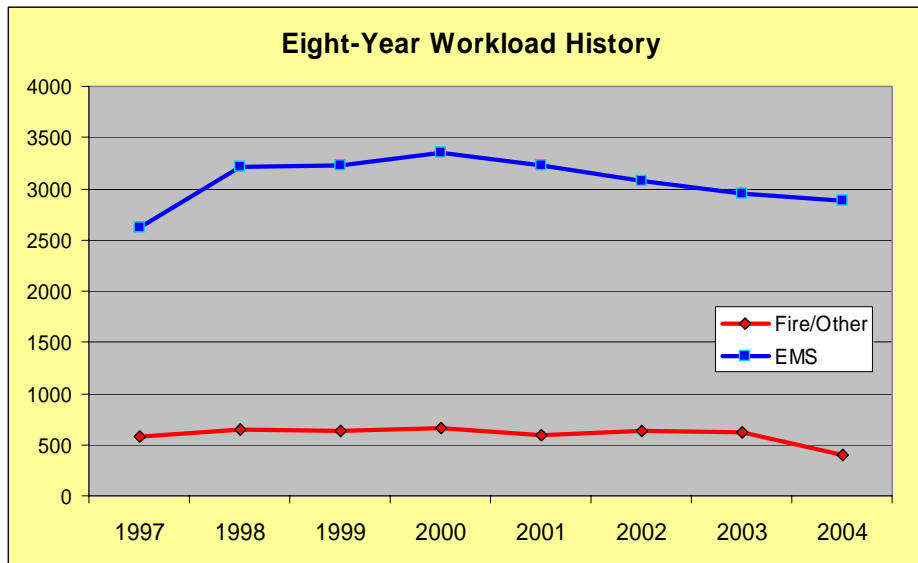
Darker shading indicates areas of higher fire risk

As stated earlier, the geographic representation of relative community fire risk/impact is useful as one element in staff and resource deployment planning.

### **Workload History**

The City of Grand Island has experienced a reasonably stable number of emergency responses.

The following chart shows how response volume has changed over the last eight years. The chart is inclusive of mutual aid calls provided to areas outside the city limits of Grand Island.

**Figure 5: Workload Historical Data**

### **Workload Projections**

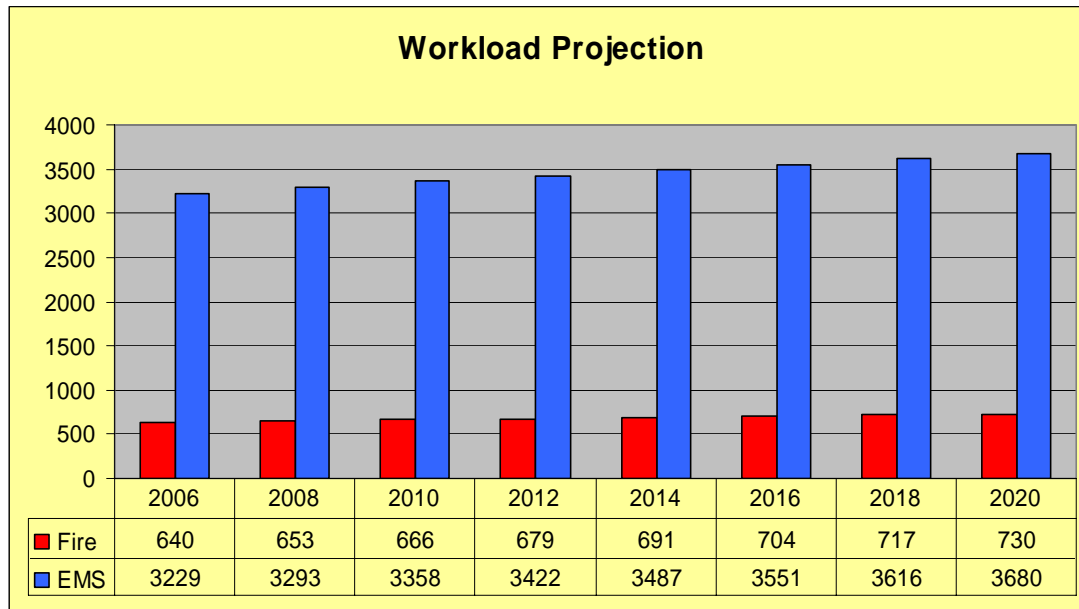
In evaluating the deployment of facilities, resources and staffing, it is important that consideration be given to potential changes in workload that could directly affect such deployment. Radical changes in service demand can require changes and adjustments in the deployment of staff and resources in order to maintain acceptable levels of performance.

For purposes of this study, we utilized population projections obtained through census information and multiplied these by incident rate figures to identify workload potential through the year 2020. The incident rate figures for fire and EMS for each year are an average of the incident rate per thousand residents experienced during the previous twelve years for fire and eight years for EMS. These numbers should provide a reasonable reflection of the anticipated trends.

The results of the analysis are shown, by year, in the following chart and table.



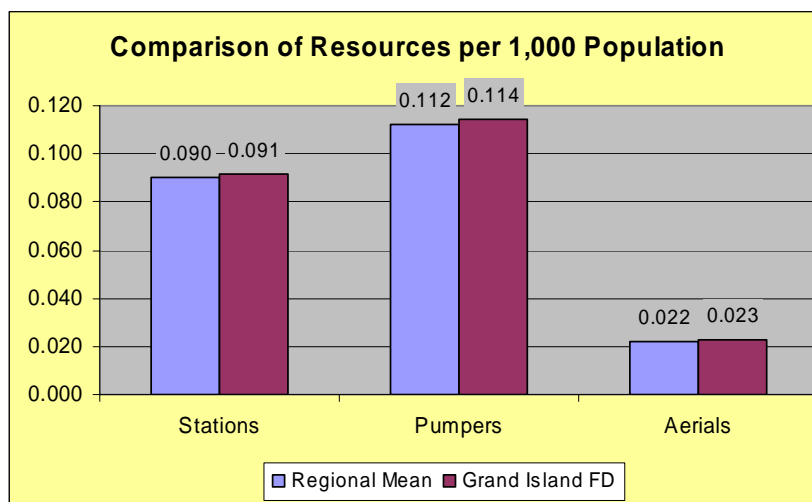
**Figure 6: Emergency Incident Volume Projection By Type And Year**



## SYSTEM BENCHMARK COMPARISONS

The following chart compares the number of apparatus and facility resources, by type, of the Grand Island Fire Department to other cities of similar size in the north central region of the United States<sup>1</sup>. The chart indicates that the City of Grand Island is operating with a fairly normal number of fire stations, engines, and aerial devices as a typical community of this population size. Comparison data is from the National Fire Protection Association "2002 Fire Department Profiles" publication.

**Figure 7: Comparative Analysis- All Apparatus and Facilities**



We note that the chart compares physical assets available to the department (reserve apparatus not included). It is not intended to reflect the number of in-service companies that are staffed and available for dispatch. In Grand Island, two of the pumpers shown above are actually cross-staffed with another vehicle. When one vehicle is on a call, the remaining fire suppression resource with which it is cross-staffed is no longer available for a call. Were the two cross-staffed pumpers removed from the benchmark comparison, Grand Island's pumper ratio would drop to .069.

<sup>1</sup> The NFPA statistical data breaks the U.S. into four regional areas: north east, south east, north central and west. Nebraska falls into the north central region and comparison data is taken from that group.

## Current Resources and Deployment

### Current Facility and Apparatus Deployment

The Grand Island Fire Department operates out of four facilities, distributed across the urbanized areas of the city. The following information provides a photo of each facility, its location, and the front-line apparatus<sup>2</sup> assigned to the facility at the time of the study.

#### **Station # 1- 302 Pine Street S.**



#### **Station # 2- 1720 Broadwell Avenue N.**



#### **Station # 3- 2310 Webb Road S.**



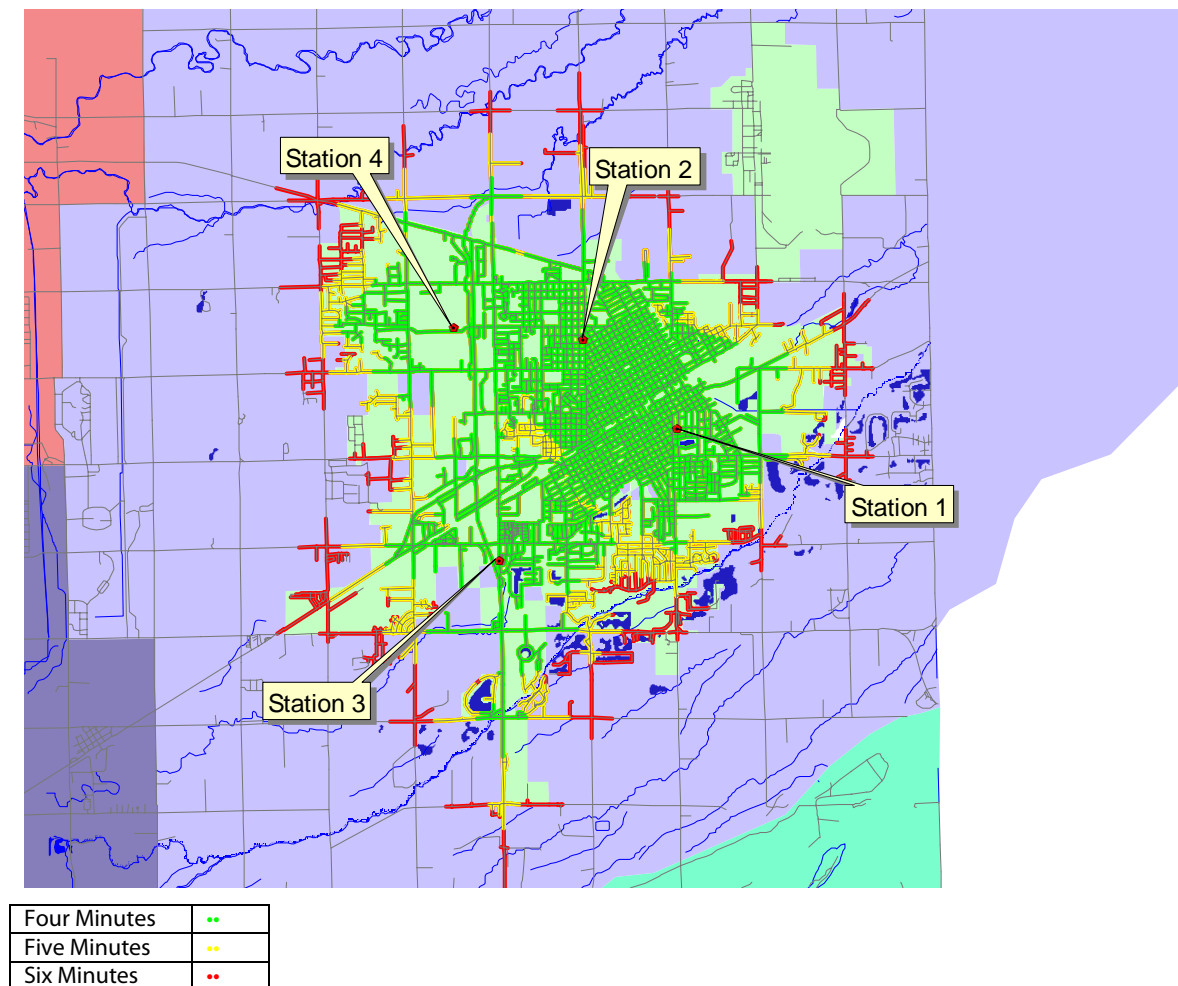
#### **Station # 4- 3690 State Street W.**



<sup>2</sup> The pumper and ladder shown at station #2 and the pumper and rescue shown at station #3 are considered front-line apparatus, but are cross-staffed with a single three-person crew.

The following map depicts the locations of the four current fire stations, and demonstrates the response time capabilities of these stations. The response time is modeled using a one-minute turnout time and projected travel time on the actual roadway network, with travel speeds of based on road classifications. The portions of streets shown with a green overlay are within a four-minute response profile of a fire station. Portions of streets shown with a yellow overlay are within a five-minute response profile of a fire station. Portions of streets shown with a red overlay are within a six-minute response profile of a fire station. The intent of this map is to provide quick visual display of the response times that can be anticipated to be “normal” within the various geographic areas of the City.

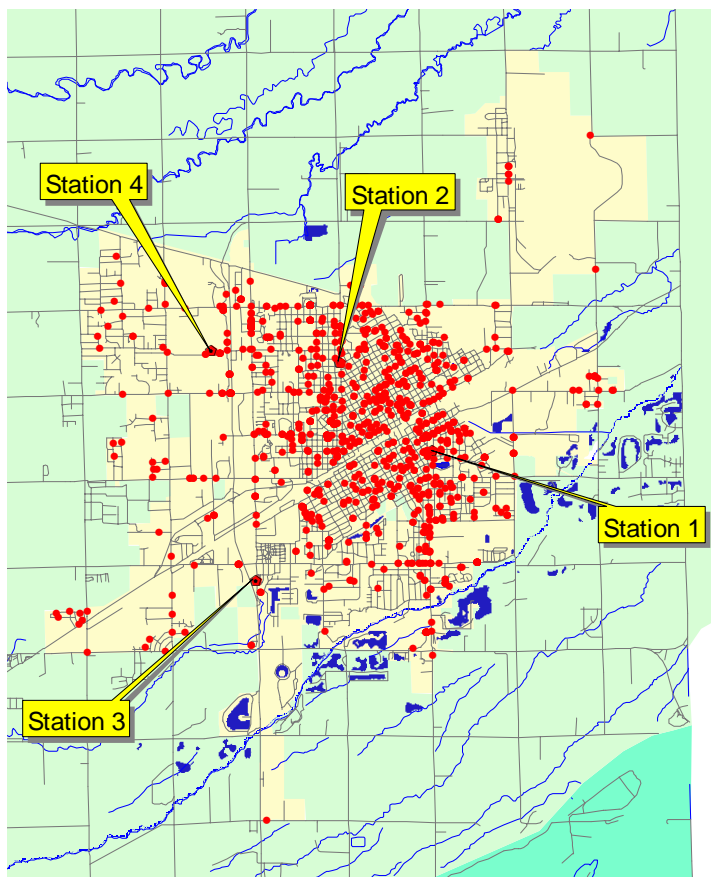
**Figure 8: Current Response Time Capability Of GIFD Stations**



A detailed geographic analysis indicates that this current station deployment is capable of reaching 90% of the City's developed areas within a six-minute response time, 78% within a five-minute response time and 63% within a four-minute response time.

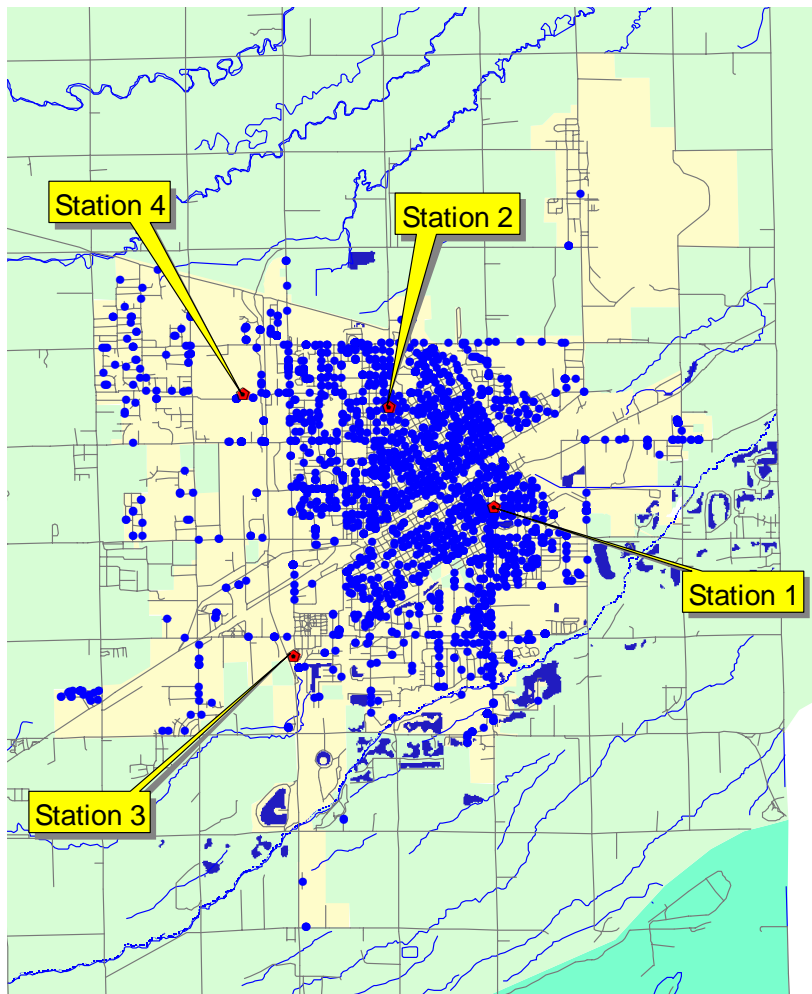
In addition to the geographic coverage of the current station, it is also useful to examine the location of the station in comparison to the actual service demand within the area. The following map indicates the geographical location of fire incidents and other non-medical calls responded to by the Grand Island Fire Department during the previous twenty-four calendar month period.

**Figure 9: Service Demand- Fire and Other Non-EMS Calls Preceding 24 Months**



The following map indicates the geographical location of emergency medical incidents responded to by the Grand Island Fire Department during the previous twenty-four calendar month period. For purposes of this study, the figure displays only the immediate Grand Island area and is not intended to be inclusive of the entire region under GIFD's EMS jurisdiction.

**Figure 10: Service Demand- Emergency Medical Calls Preceding 24 Months**

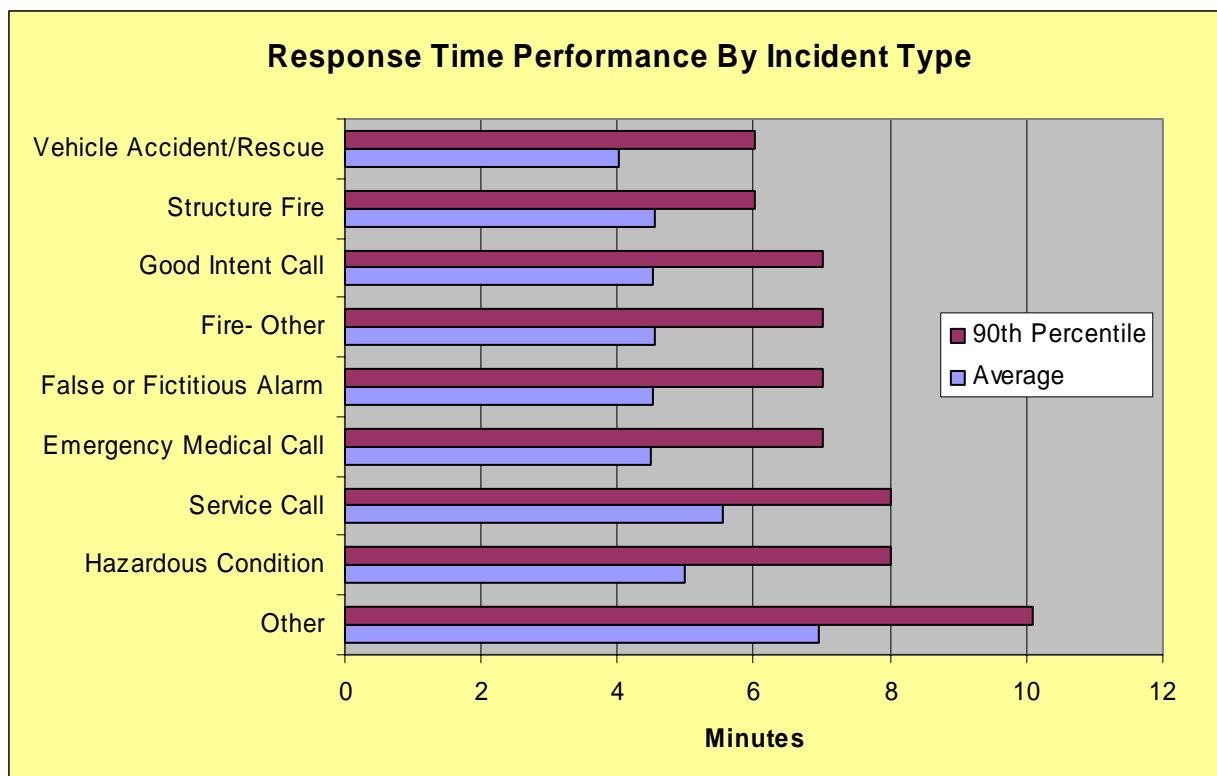




A detailed service demand analysis indicates that this current station deployment is capable of reaching over 96% of the City's fire-related incidents and over 95% of the City's emergency medical incidents within a six-minute response time.

In fact, review of statistical information reveals that the department's average response time within the City during the last two years is five minutes. The following figure provides greater detail of the actual response time performance of the department. Average and 90<sup>th</sup> percentile response times are shown for various types of emergency incidents.

**Figure 11: Actual Response Time Performance By Type Of Incident**



### **Current Staffing Deployment**

Grand Island currently staffs its station with personnel who are cross-trained to operate in both fire suppression and emergency medical services and whose assignment to apparatus or companies may vary from incident to incident.

Up to twenty-one personnel may be assigned to each of three rotating 24-hour shifts. When all positions are filled and no leave vacancies are occurring, all twenty-one of these personnel would be on-duty, with five of these being company officers. Given the standard leave time per employee provided in the employment policies, this level of staffing is the exception rather than the rule. Minimum staffing levels are set at sixteen per shift, with at least four company officers.

A structure fire dispatch<sup>3</sup> in Grand Island receives a standard of coverage that includes the dispatch of two engines, one ambulance, and one truck (aerial), along with either a rescue or a third pumper (geography dependent). This standard of coverage provides for a maximum initial response staffing of nineteen and a minimum staffing of fourteen personnel at a structure fire.

Low-risk incidents, such as vehicle fires, rubbish fires and other such calls are typically provided a standard of coverage involving a single engine. This standard of coverage provides for a maximum initial response staffing of four and a minimum staffing of three personnel at a low-risk fire incident. Those incidents involving, or potentially involving, emergency medical needs are also provided an ambulance and an additional two persons.

An eight-agency regional mutual aid system is in place. This system has the capability for expanding the response to major incidents at the fourth alarm and higher, providing additional staffing to the incident from surrounding agencies. Agencies involved in the regional system include Alda, Cairo, Chapman, Doniphan, Grand Island Rural, Phillips, and Wood River, and Saint Libory Fire Departments.

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<sup>3</sup> Other classes of moderate and high risk incidents are typically also given this full-alarm response protocol.



### **Current Staffing Evaluation**

Tasks that must be performed at a fire can be broken down into two key components, life safety, and fire flow. The life safety tasks are based upon the number of building occupants, their location, status, and ability to take self-preservation action. Life safety related tasks involve the search, rescue, and evacuation of victims. The fire flow component involves delivering sufficient water to extinguish the fire and create an environment within the building that allows entry by firefighters.

The number and types of tasks needing simultaneous action will dictate the minimum number of firefighters required to combat different types of fires. In the absence of adequate personnel to perform concurrent action, the command officer must prioritize the tasks and complete some in chronological order rather than concurrently. These tasks include:

- Command
- Scene safety/Accountability
- Search and rescue
- Fire attack
- Water supply
- Pump operation
- Ventilation
- Back-up/Rapid intervention

The Commission on Fire Accreditation International of the International Association of Fire Chiefs (IAFC) has produced benchmarks for the number of personnel required on scene for various levels of risk. Low-risk incidents typically refer to trash and small vehicle fires, investigations, wires down, or other incidents with little threat of spread. Moderate risk typically refers to structure fires up to and including single family residential structures of 2,200 square feet. High risk typically refers to commercial or industrial buildings, and single or multi-family residential structures up to three stories. Maximum risk refers to large-scale conflagrations, multiple building involvement, high-rise structures, large square-footage structures, extensive hazardous materials incidents and other types of calls requiring large amounts of manpower and equipment beyond the third or fourth alarm. This information is shown in the following chart.



**Figure 12: Staffing Needs By Risk**

<b>Minimum Firefighting Personnel Needed Based On Level of Risk</b>				
<b>Task<sup>4</sup></b>	<b>Max. Risk</b>	<b>High Risk</b>	<b>Mod. Risk</b>	<b>Low Risk</b>
Attack line	4	4	2	2
Search and rescue	4	2	2	
Ventilation	4	2	2	
Backup line/rapid intervention	4	3	2	2
Pump operator	1	1	1	1
Water supply	1	1	1	
Utilities support	1	1	1	
Command/safety	2	2	2	1#
Forcible entry	*			
Salvage	*			
Overhaul	1*			
Communication	1			
Chief's aide	1	1		
Operations section chief	1			
Logistics	1			
Planning	1*			
Staging	1*			
Rehabilitation	1			
Division/group supervisors	2*			
High-rise evacuation	10*			
Stairwell support	10*			
<b>Total</b>	<b>49</b>	<b>17</b>	<b>13</b>	<b>6</b>

# Can often be handled by the first due officer.

\* At maximum and high-risk fires, additional personnel may be needed.

The other widely accepted model for incident staffing is the National Fire Protection Association Standard 1710 "Organization and Deployment of Fire Suppression Operations... By Career Fire Departments". Like the Accreditation Model, this standard calls for the assignment of at least 13 personnel on a first-alarm structural fire incident response, 14 personnel when an aerial device is in operation. This standard calls for all companies to be staffed by four personnel, either responding together as a single company or in multiple vehicles with pre-designated assignment to assemble as a four-person company upon arrival.

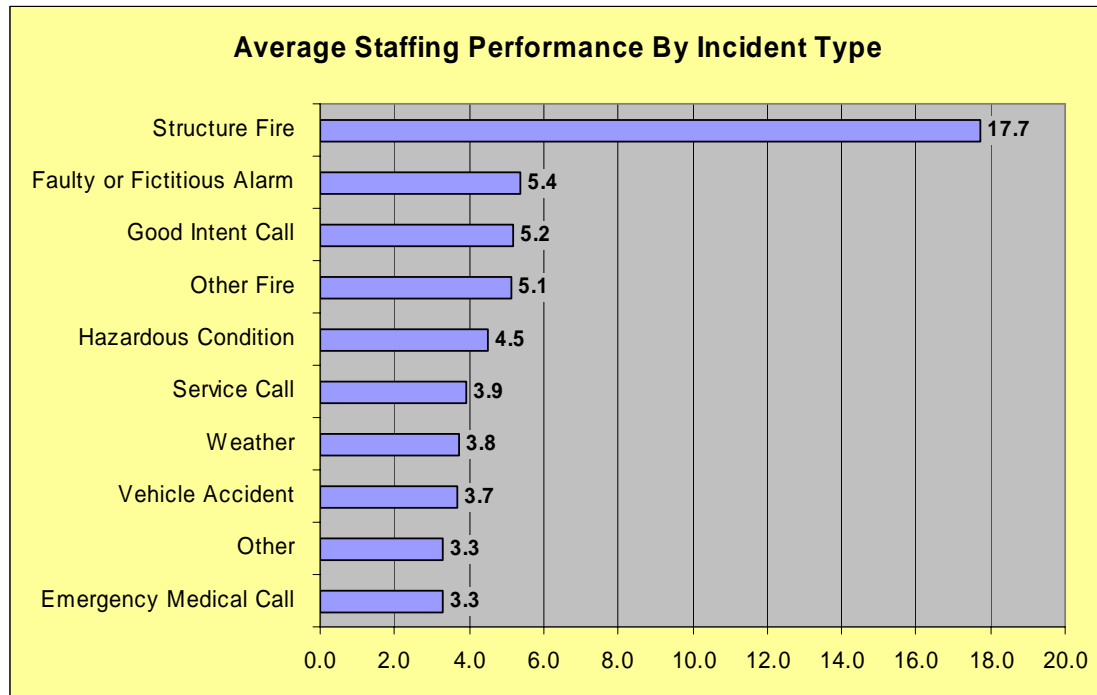
Utilizing the standard of coverage currently adopted by Grand Island Fire Department for low-risk incidents does not provide for a six-person response as provided by

<sup>4</sup> All tasks may be functional during the early moments of firefighting, but sometimes certain duties take place in sequence depending on the situation, thus reducing the total number of people needed.

example in the Accreditation Model. However, since the model does not require these personnel to arrive within any specific time frame, it is assumed that additional manpower can be requested when attack lines are put in operation at such incidents to achieve six-person incident staffing when necessary. However, current procedures also do not provide consistent four-person first-due company staffing as required by NFPA 1710 during periods of minimum engine staffing.

Utilizing the standard of coverage currently adopted by Grand Island Fire Department will provide sufficient staffing to both match the Accreditation Model for all moderate risk incidents and meet the recommendations of NFPA 1710 for initial alarm structure fire assignments. The department uses additional alarm assignments and call-back of off-duty personnel to meet the staffing requirements for high-risk incidents. Maximum risk incidents are rare and are typically considered to be incidents that, by their nature, involve the use of extensive special-called mutual aid, as provided by the regional program.

In addition to reviewing the department's standard or cover to evaluate the sufficiency of its staffing, we also analyzed data from the past two years and identified the actual incident staffing performance by type of call. The following figure provides the average on-scene staffing by various classifications of incidents.

**Figure 13: Average Staffing Performance By Type Of Call**

The figure indicates that GIFD has had relatively good success at achieving higher staffing on structural fire incidents through the use of call-back of off-duty personnel.



## **SERVICE DELIVERY OPTIONS**

During the course of this study, we have extensively utilized Geographic Information Systems (GIS) software to analyze response times of both apparatus and personnel by modeling this response against the actual roadway network. This process allows us to create and model various deployment strategies with surprising accuracy.

In addition, the use of geographic placement of data relating to actual incident service demand from the previous two calendar years allows us to summarize the modeled performance of these deployment strategies, again with great detail.

The analysis of the current resource and staffing deployment is found in a previous section of this report, including performance levels in both geographic coverage and service demand coverage. The following sections describe our analysis of four additional deployment strategies.

### **Future “Full Buildout” Deployment Strategy**

In a jurisdiction experiencing growth and development, it is critical to think well in advance when developing strategies for station deployment. Failure to do so can often require the later relocation of stations built with insufficient consideration to the buildout of the community. As a community develops, there tends to be a natural urge to build fire stations where they are best suited to serve the development as it exists at the moment when funds are made available for the project. However, these locations often turn out to be inadequate when further development occurs later on.

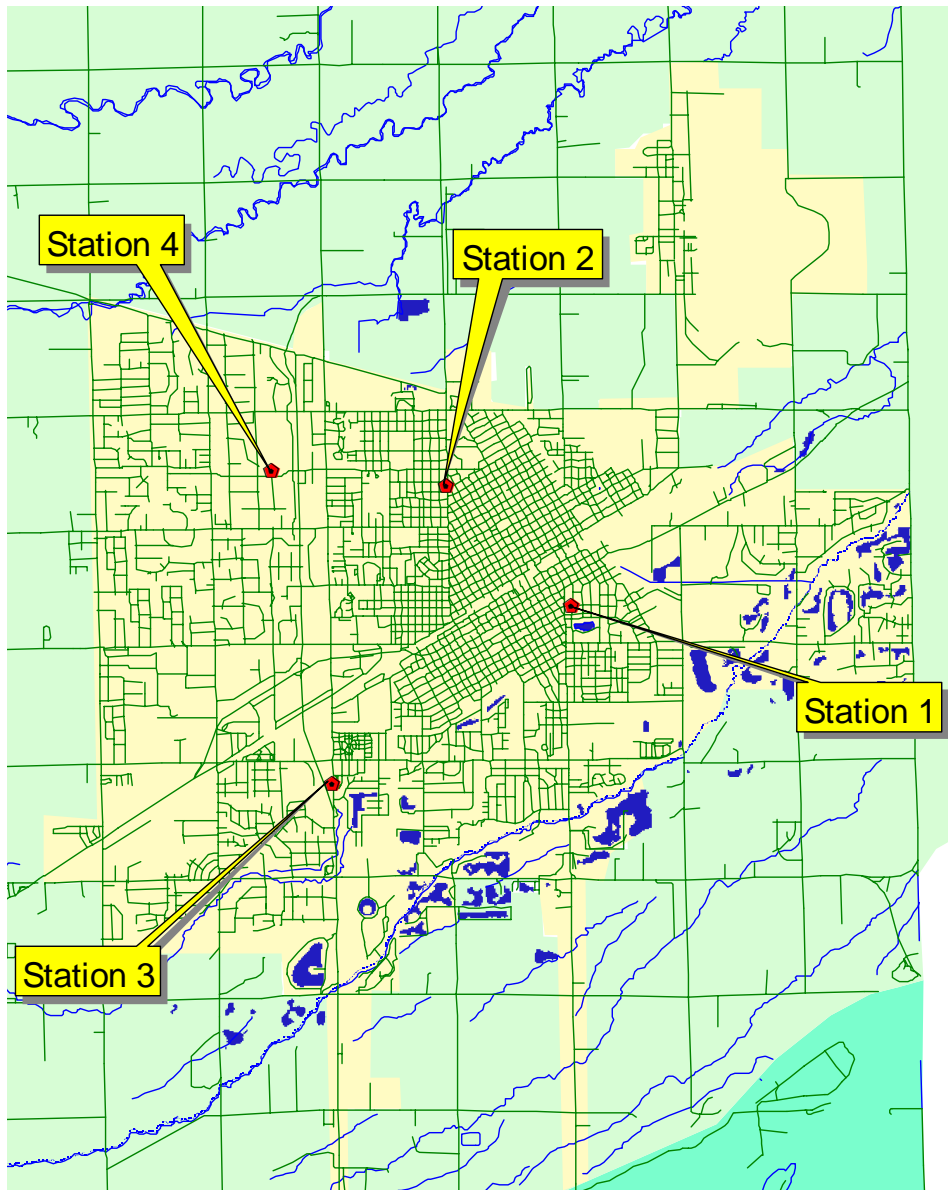
For this reason, we strongly recommend that growing communities begin by developing “buildout projections” of street networks and service demand as it may exist in the distant future. This can provide the foundation for a station deployment strategy that will provide adequate and effective service delivery when full development of the community is completed.

The response time performance benchmark for this study was the standard used by the Grand Island Fire Department of first-due unit arrival of six-minutes or less to 90% of incidents, with a full-alarm arrival of ten minutes or less.

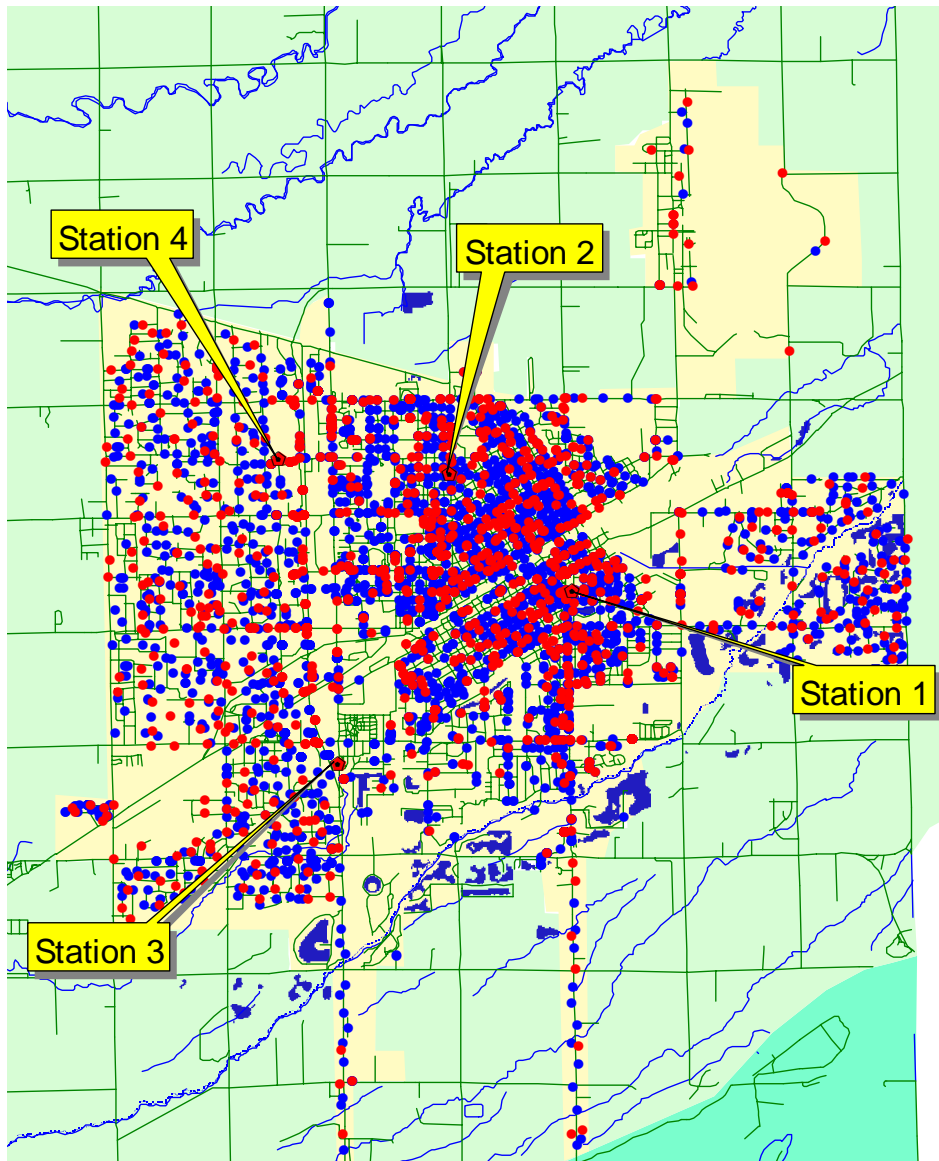
As indicated earlier, we begin by creating a “buildout projection” of the community served by GIFD. This is done by taking the street networks in existing neighborhoods and replicating them in undeveloped areas of the community that have similar assigned land-use and zoning in the community’s comprehensive plans and are expected to fully develop within the planning period covered by this study. Consideration of potential annexations by the City is also depicted in the buildout. Major thoroughfare networks and transportation corridor improvements that are identified in the plans are also considered, to the extent possible. The information used in the construction of this model is derived from interviews with City planning officials, along with the City’s comprehensive plan.

While this results in, at best, a sort of “artist’s rendition” of what the community may be like in the future, it does provide some basis on which to model the effectiveness of various deployment strategies that depend on street networks for analysis. The following map depicts this “buildout projection” of future community development.



**Figure 14: Future Street Network Buildout Projection**

In similar fashion, service demand is modeled by replicating the service demand within existing neighborhoods. Service demand from the previous twelve months was used as the basis for this projection. Red dots represent projected future fire incidents and green dots represent projected future EMS incidents for graphic depiction of potential service demand.

**Figure 15: Future Service Demand Buildout Projection**

Under this projected service demand, the current GIFD facility deployment would be capable of a six-minute response time to only 73% of the road miles of the City<sup>5</sup> and about 93% of incidents in the future. This is would be a slight degradation from current service delivery levels.

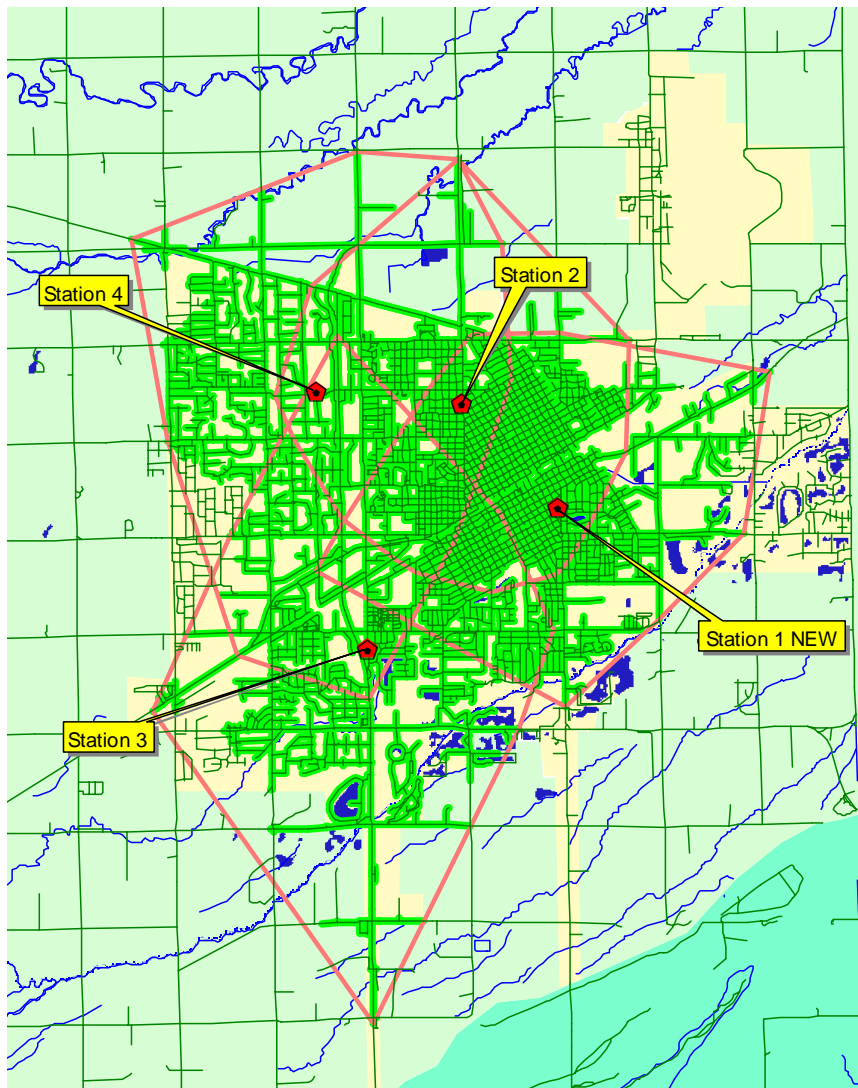
<sup>5</sup> Number represents a percentage of total number of miles of developed roadways in the City.

### **Deployment Strategy A- New Station #1 at Walnut and Charles Streets**

This strategy would involve the abandonment of the current fire station #1 and the establishment of a new fire station at or near the intersection of **Walnut and Charles** streets.

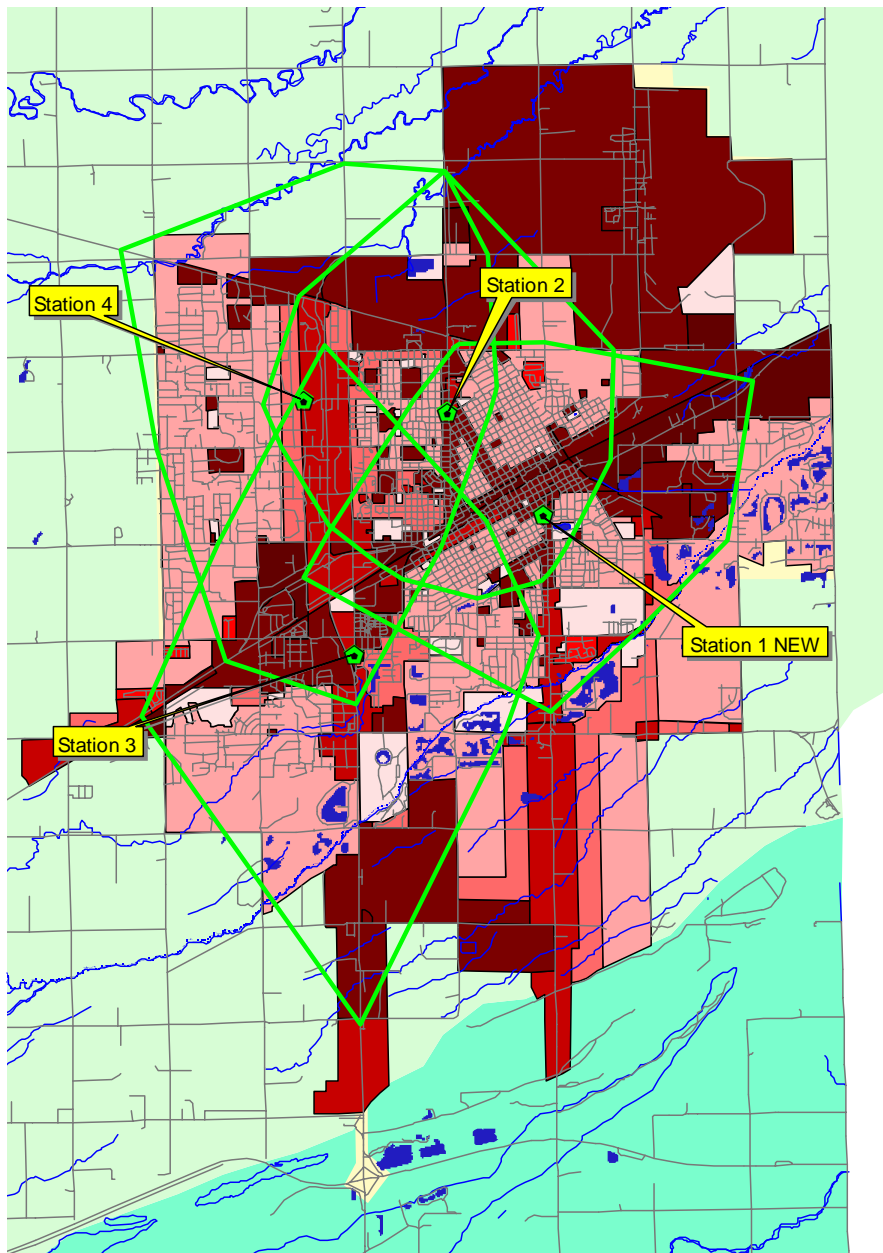
The following figure demonstrates this deployment strategy. The six-minute response capability of this proposed station deployment are shown in green overlays.

**Figure 16: Deployment Strategy "A"**



The following map demonstrates the six-minute coverage areas of each proposed station location overlaid on the community risk designations. This view permits the reader to visually appraise the depth of six-minute station coverages against areas of highest fire impact risk.

**Figure 17: Strategy A Coverage and Community Risk**



### **Strategy A Projected Performance**

This deployment strategy demonstrates only a slight improvement in target-level service performance when compared to what would be provided by the current deployment after projected community development. Performance models for the strategy, along with comparison figures, are shown in the following tables.

The first table provides the projected performance of this deployment strategy for the community as it exists today. The comparison figures are the current levels of service experienced by the community. Current service demand and the current street network were used in this analysis.

**Figure 18: Strategy "A" Performance Analysis**

<b>Performance Projection on Current City Streets and Service Demand</b>		
<b>Deployment Strategy</b>	<b>Percent of Service Demand</b>	<b>Percent of Road Segments</b>
	<b>&lt;6:00</b>	<b>&lt;6:00</b>
Current Deployment Capability	95%	90%
Strategy "A"	98%	90%

The next table provides the projected performance of this deployment strategy were the community to develop to the full extent discussed in previous sections of this study. The comparison figures are the levels of service projected if current deployment is continued without change (status quo). Projected service demand and a projected street network similar in nature to that which may be present if the City develops as expected were used in this analysis.

<b>Performance Projection on Future Development and Service Demand</b>		
<b>Deployment Strategy</b>	<b>Percent of Service Demand</b>	<b>Percent of Road Segments</b>
	<b>&lt;6:00</b>	<b>&lt;6:00</b>
Status Quo at Full Future Buildout	92%	73%
Strategy "A"	93%	82%

As can be seen in the table, response time performance, even after full community buildout, would be below six minutes for well over 90% of all incidents. This strategy **will** achieve the target objective of six minutes or less to at least 90% of the incidents.

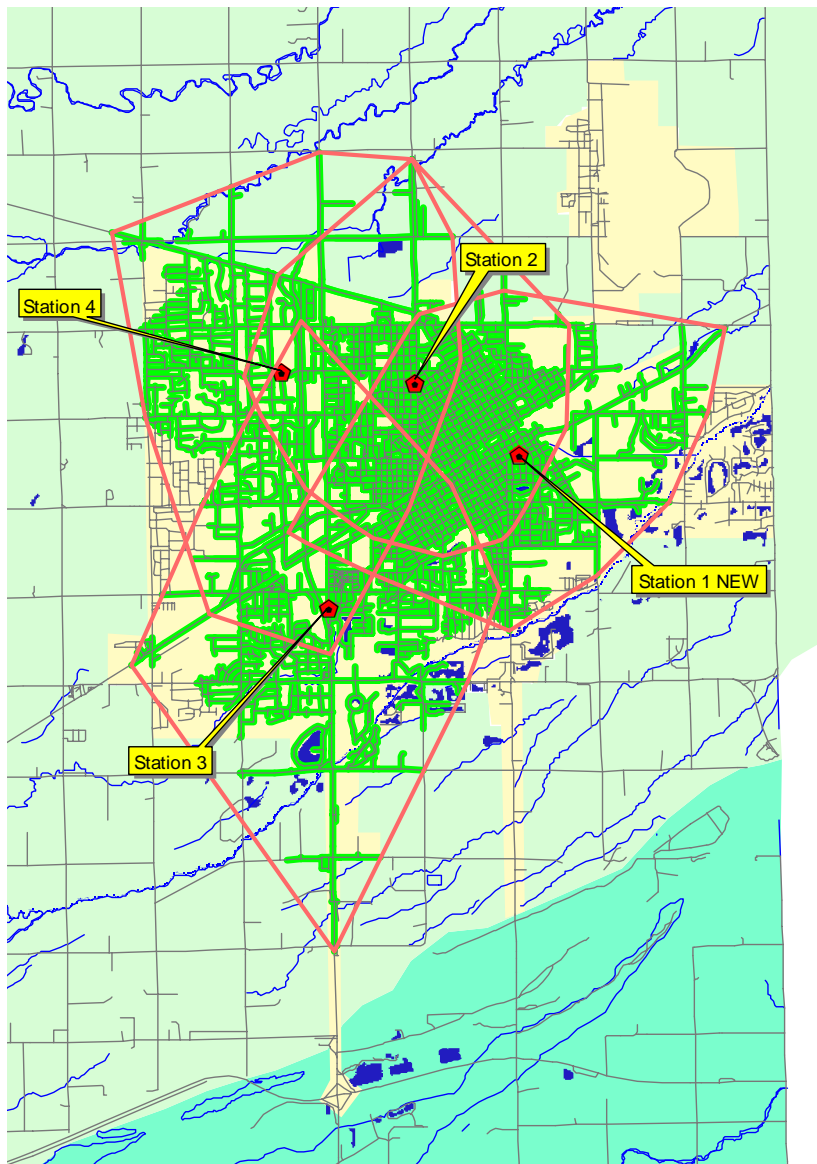


**Deployment Strategy B- New Station #1 at Sycamore and First Streets**

This strategy would involve the abandonment of the current fire station #1 and the establishment of a new fire station at or near the intersection of **N. Sycamore and E. First Streets**.

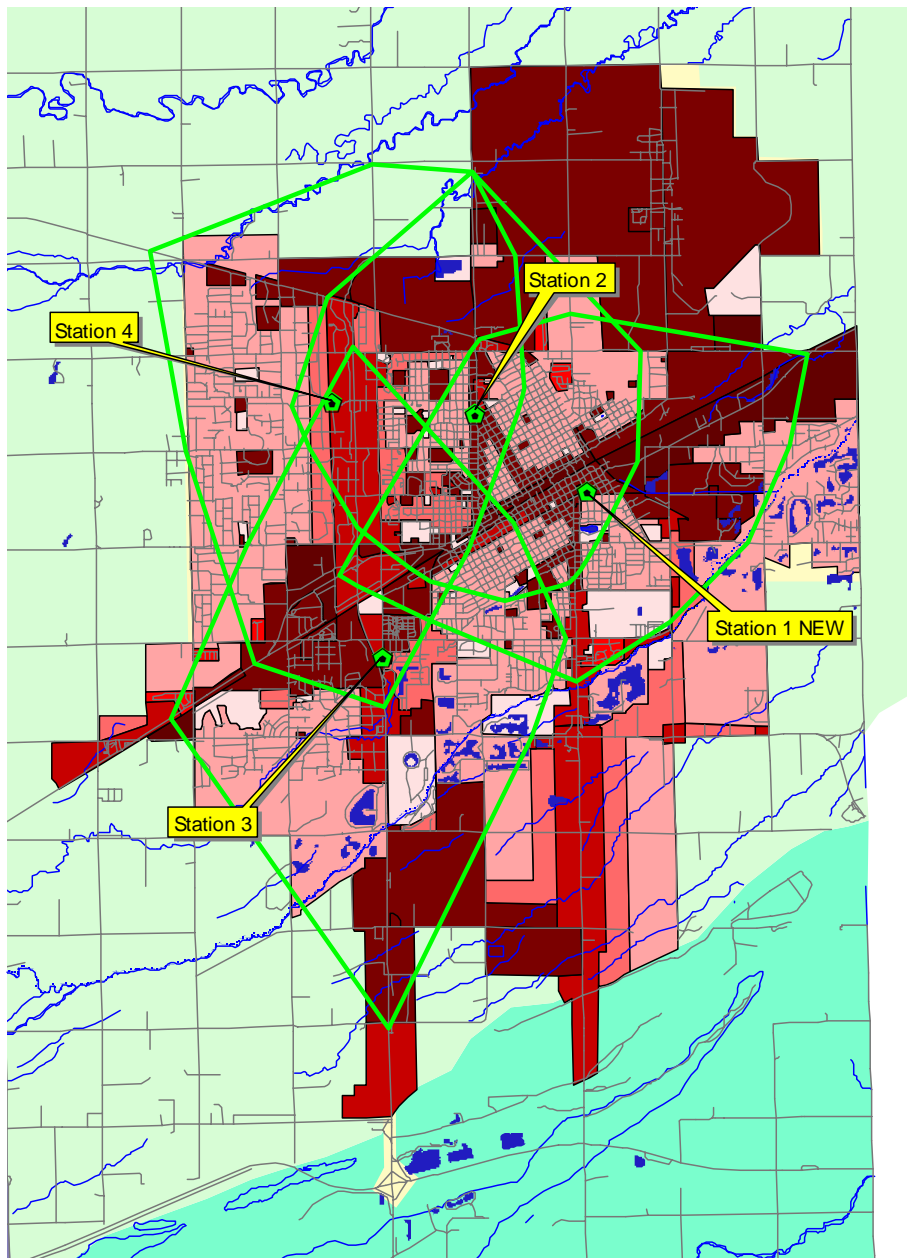
The following figure demonstrates this deployment strategy. The six-minute response capability of this proposed station deployment are shown in green overlays.

**Figure 19: Deployment Strategy "B"**



The following map demonstrates the six-minute coverage areas of each proposed station location overlaid on the community risk designations. This view permits the reader to visually appraise the depth of six-minute station coverages against areas of highest fire impact risk.

**Figure 20: Strategy B Coverage and Community Risk**



### **Strategy B Projected Performance**

This deployment strategy demonstrates a slight regression in target-level service performance when compared to what would be provided by the current deployment after projected community development. Performance models for the strategy, along with comparison figures, are shown in the following tables.

The first table provides the projected performance of this deployment strategy for the community as it exists today. The comparison figures are the current levels of service experienced by the community. Current service demand and the current street network were used in this analysis.

**Figure 21: Strategy "B" Performance Analysis**

<b>Performance Projection on Current City Streets and Service Demand</b>		
<b>Deployment Strategy</b>	<b>Percent of Service Demand &lt;6:00</b>	<b>Percent of Road Segments &lt;6:00</b>
Current Deployment Capability	95%	90%
Strategy "B"	95%	90%

The next table provides the projected performance of this deployment strategy were the community to develop to the full extent discussed in previous sections of this study. The comparison figures are the levels of service projected if current deployment is continued without change (status quo). Projected service demand and a projected street network similar in nature to that which may be present if the City develops as expected were used in this analysis.

<b>Performance Projection on Future Development and Service Demand</b>		
<b>Deployment Strategy</b>	<b>Percent of Service Demand &lt;6:00</b>	<b>Percent of Road Segments &lt;6:00</b>
Status Quo at Full Future Buildout	92%	73%
Strategy "B"	91%	82%

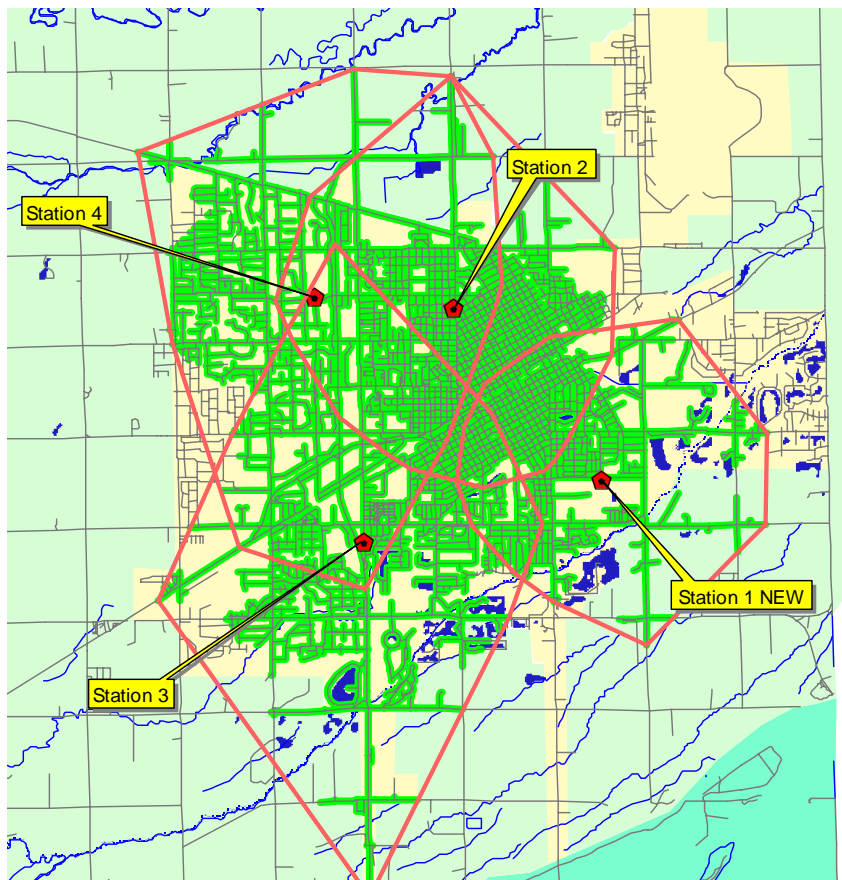
As can be seen in the table, response time performance, even after full community buildout, would be below six minutes for over 90% of all incidents. This strategy **will** achieve the target objective of six minutes or less to at least 90% of the incidents.

### **Deployment Strategy C- New Station #1 on E. Fonner Park Road**

This strategy would involve the abandonment of the current fire station #1 and the establishment of a new fire station on **E. Fonner Park Road** between Pleasant View Drive and Stuhr Road.

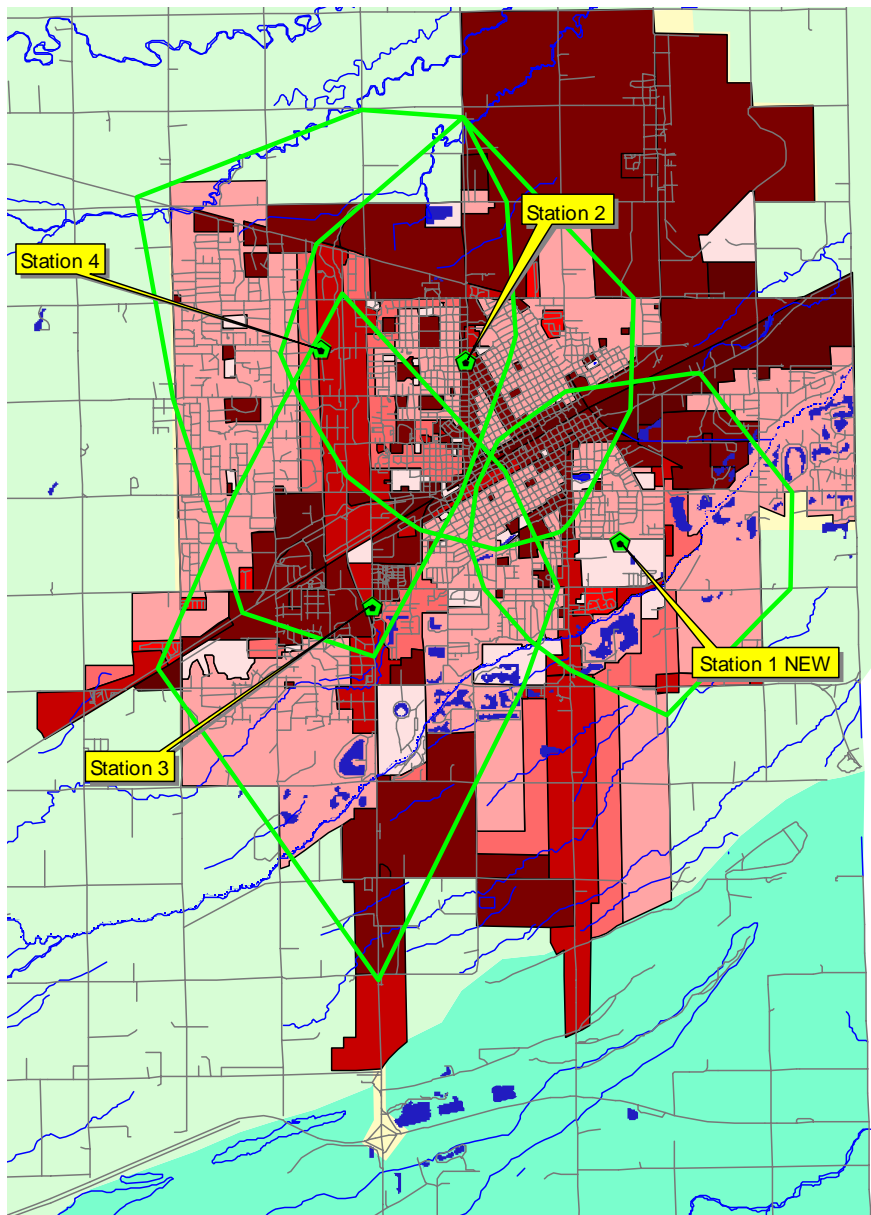
The following figure demonstrates this deployment strategy. The six-minute response capability of this proposed station deployment is shown in green overlays.

**Figure 22: Deployment Strategy "C"**



The following map demonstrates the six-minute coverage areas of each proposed station location overlaid on the community risk designations. This view permits the reader to visually appraise the depth of six-minute station coverages against areas of highest fire impact risk.

**Figure 23: Strategy C Coverage and Community Risk**

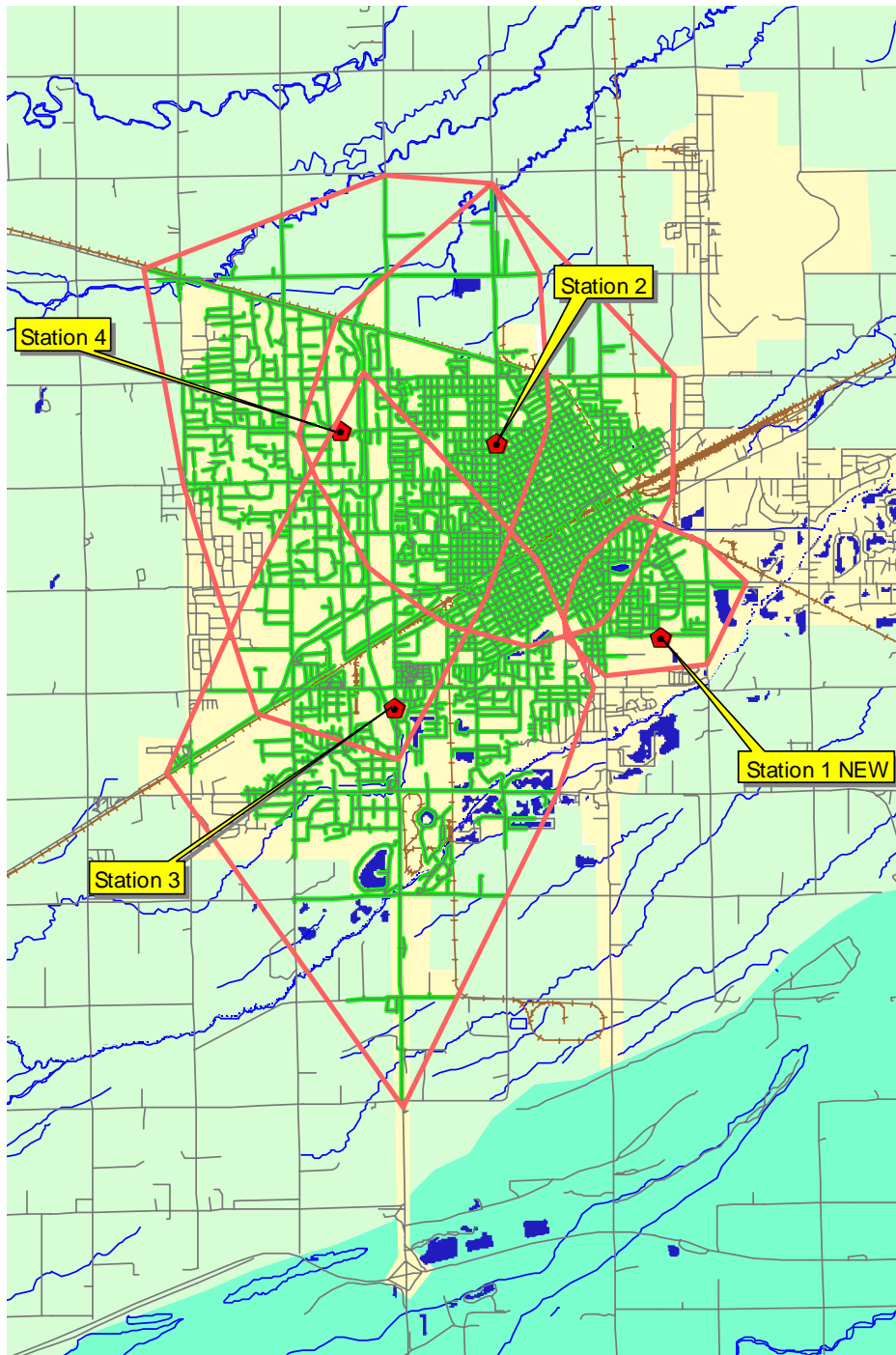




In the explanation of this strategy, it is important to mention that the area surrounding this potential fire station site is likely to develop with a multi-purpose entertainment center known as the “Heartland Center”. Events at this center are anticipated to draw crowds as large as 7,000 persons. Main entrances to the complex are initially expected to exit onto Fonner Park Road in the vicinity of this potential fire station site.

As a result, we caution the City to consider how the development of the entrance and exit system for the complex might affect the fire station, were it to be located in this area. Clearly, several thousand people exiting the complex simultaneously could result in significant traffic congestion that would adversely impact response time from that station.

To demonstrate this possible impact, we prepared a second map of the response capability of the proposed deployment, but reduced travel speeds on all road segments in the immediate four block area surrounding the proposed Fonner Park Road fire station. The map vividly shows the significantly reduced response time capability of that station through traffic congestion in just the immediate area of the station.

**Figure 24: Deployment Strategy "C" with Area Traffic Congestion**

We are not suggesting that the traffic congestion from the Heartland Complex would not be manageable. Indeed, many other fire departments across the country have been able to successfully deal with venues such as this, and even much larger, without

compromising public safety. It does, however, point out the need for extremely thorough planning if this site were chosen as part of the deployment. The City, the fire department, the police department, and other agencies both public and private will need to work together to develop an emergency traffic route plan for periods of major congestion.

### **Strategy C Projected Performance**

This deployment strategy demonstrates only a slight improvement in target-level service performance when compared to what would be provided by the current deployment after projected community development. Performance models for the strategy, along with comparison figures, are shown in the following tables.

The first table provides the projected performance of this deployment strategy for the community as it exists today. The comparison figures are the current levels of service experienced by the community. Current service demand and the current street network were used in this analysis.

**Figure 25: Strategy "C" Performance Analysis**

<b>Performance Projection on Current City Streets and Service Demand</b>		
<b>Deployment Strategy</b>	<b>Percent of Service Demand</b>	<b>Percent of Road Segments</b>
	<b>&lt;6:00</b>	<b>&lt;6:00</b>
Current Deployment Capability	95%	90%
Strategy "C"	97%	89%

The next table provides the projected performance of this deployment strategy were the community to develop to the full extent discussed in previous sections of this study. The comparison figures are the levels of service projected if current deployment is continued without change (status quo). Projected service demand and a projected street network similar in nature to that which may be present if the City develops as expected were used in this analysis.

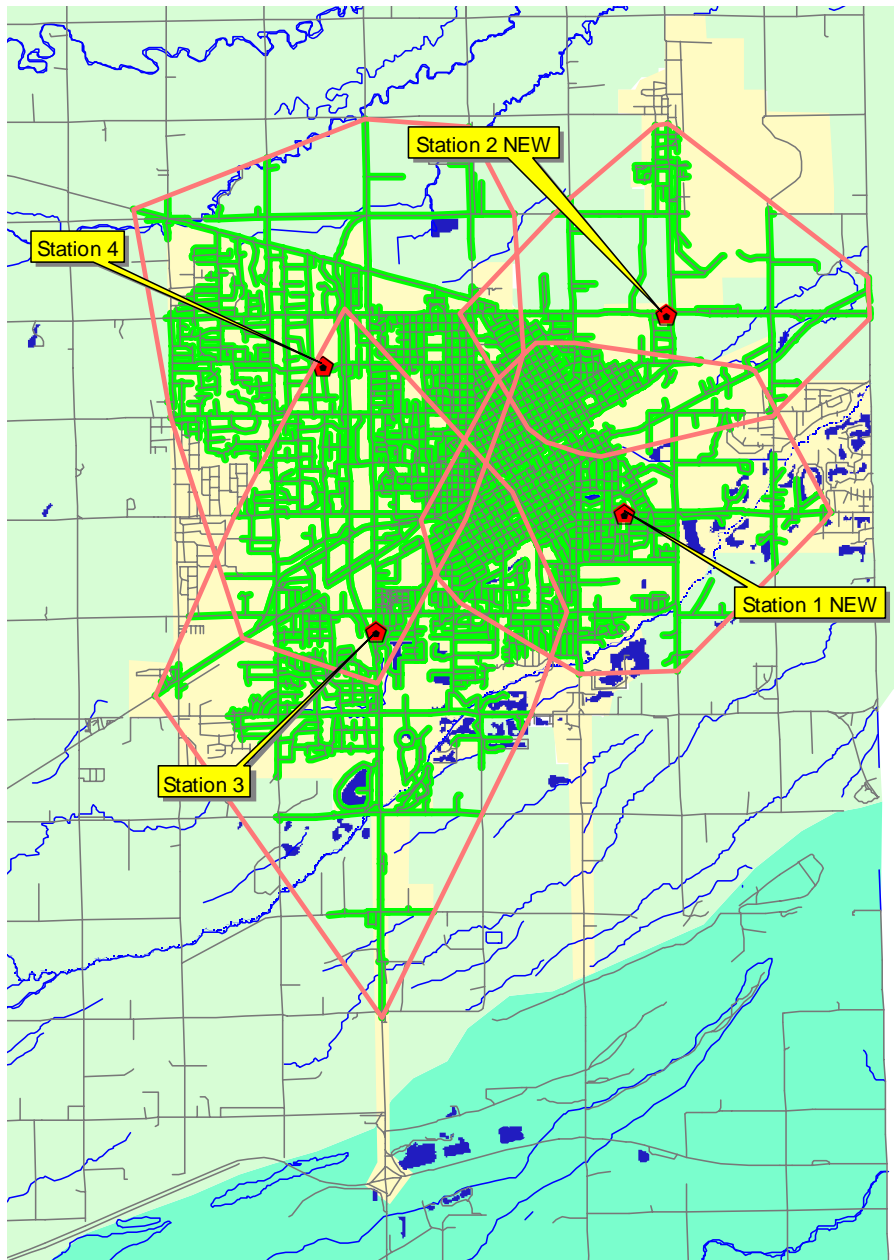
Performance Projection on Future Development and Service Demand		
Deployment Strategy	Percent of Service	Percent of Road
	Demand	Segments
	<6:00	<6:00
Status Quo at Full Future Buildout	92%	73%
Strategy "C"	93%	82%

As can be seen in the table, response time performance, even after full community buildout, would be below six minutes for over 90% of all incidents. This strategy **will** achieve the target objective of six minutes or less to at least 90% of the incidents.

### **Deployment Strategy D- Relocations of Station #1 and Station #2**

This strategy would involve the abandonment of the current fire station #1 and the establishment of a new fire station #1 on **Bismark Road** near its intersection with Plum Road. In addition, the deployment strategy would also call for eventual relocation of Station #2 to **Sky Park Road near Capital Avenue East**. The strategy was designed and analyzed specifically for consideration by the City in the event there were anticipation of the need to improve response times or capability at the regional airport facility and the manufacturing and industrial areas around it. This strategy should be considered if future airport service upgrades are expected that would require a fire station to be located on airport property.

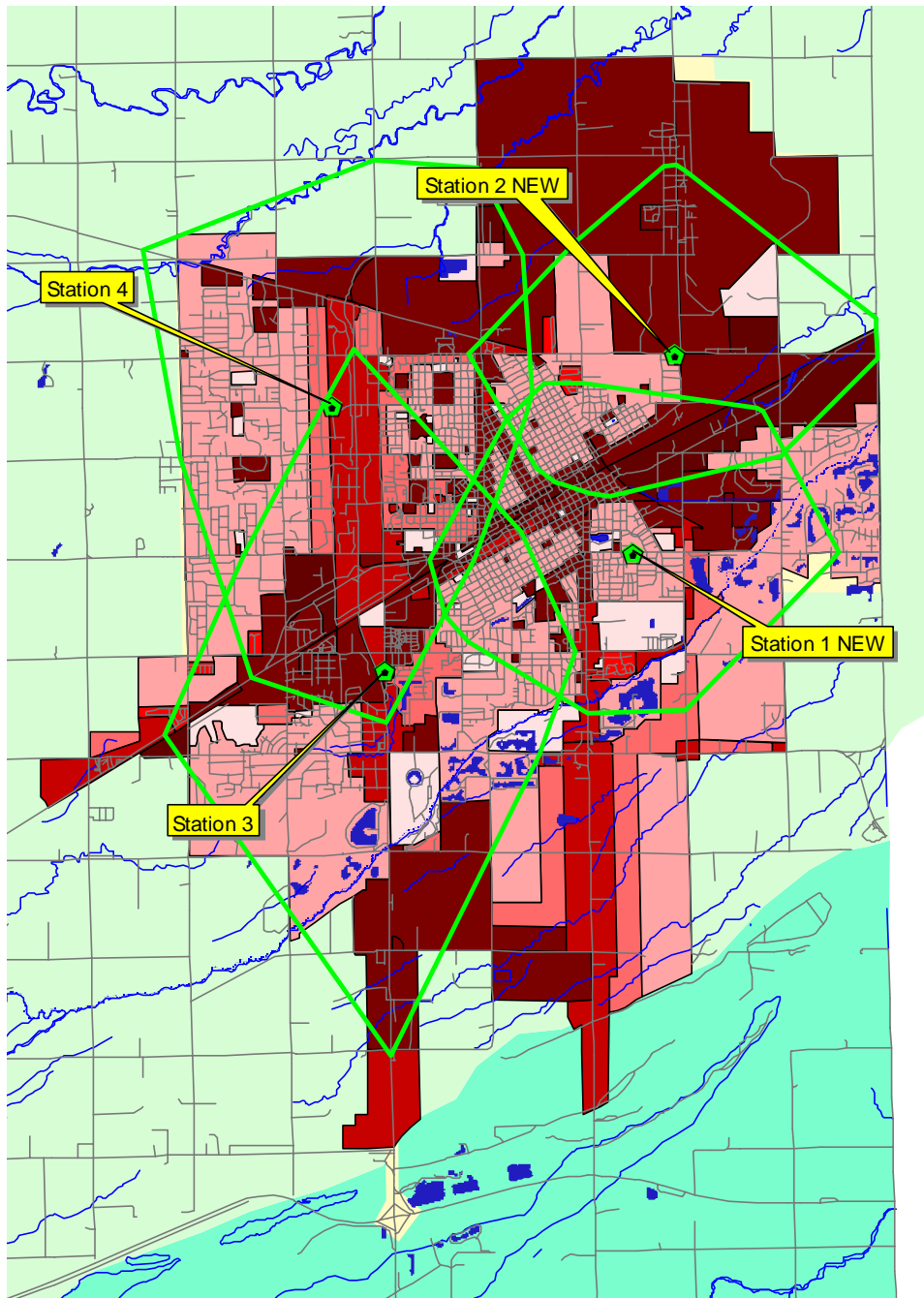
The following figure demonstrates this deployment strategy. The six-minute response capability of this proposed station deployment is shown in green overlays.

**Figure 26: Deployment Strategy "D"**

The following map demonstrates the six-minute coverage areas of each proposed station location overlaid on the community risk designations. This view permits the reader to visually appraise the depth of six-minute station coverages against areas of highest fire impact risk.



**Figure 27: Strategy D Coverage and Community Risk**



### **Strategy D Projected Performance**

This deployment strategy demonstrates little or no change in target-level service performance when compared to what would be provided by the current deployment

after projected community development. Performance models for the strategy, along with comparison figures, are shown in the following tables.

The first table provides the projected performance of this deployment strategy for the community as it exists today. The comparison figures are the current levels of service experienced by the community. Current service demand and the current street network were used in this analysis.

**Figure 28: Strategy "D" Performance Analysis**

<b>Performance Projection on Current City Streets and Service Demand</b>		
<b>Deployment Strategy</b>	<b>Percent of Service Demand &lt;6:00</b>	<b>Percent of Road Segments &lt;6:00</b>
Current Deployment Capability	95%	90%
Strategy "D"	96%	93%

The next table provides the projected performance of this deployment strategy were the community to develop to the full extent discussed in previous sections of this study. The comparison figures are the levels of service projected if current deployment is continued without change (status quo). Projected service demand and a projected street network similar in nature to that which may be present if the City develops as expected were used in this analysis.

<b>Performance Projection on Future Development and Service Demand</b>		
<b>Deployment Strategy</b>	<b>Percent of Service Demand &lt;6:00</b>	<b>Percent of Road Segments &lt;6:00</b>
Status Quo at Full Future Buildout	92%	73%
Strategy "D"	92%	85%

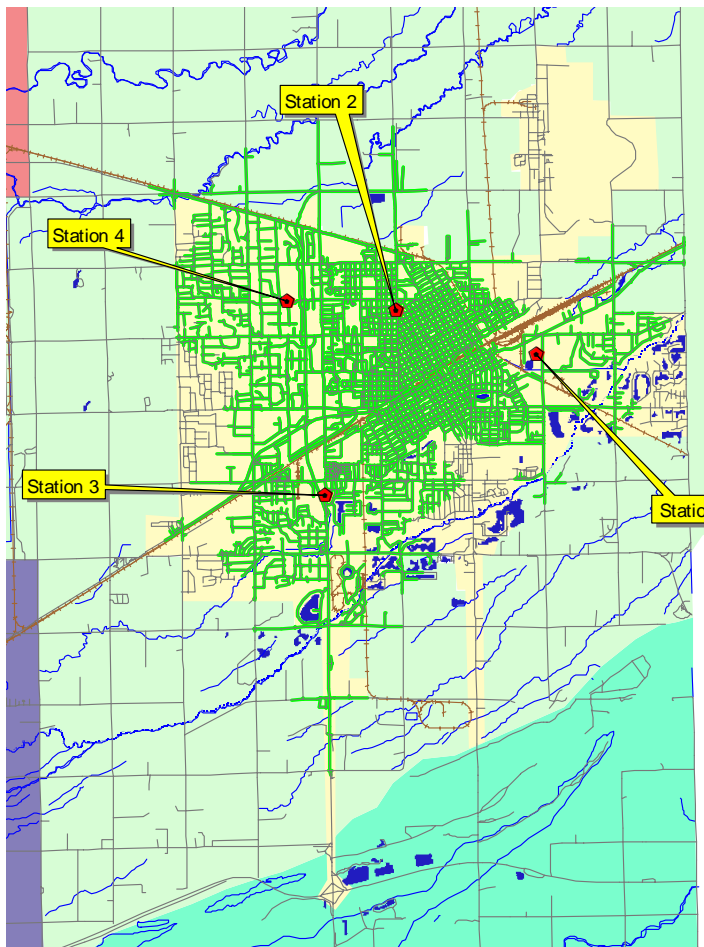
As can be seen in the table, response time performance, even after full community buildout, would be below six minutes for over 90% of all incidents. This strategy **will** achieve the target objective of six minutes or less to at least 90% of the incidents.

### **Deployment Strategy E- Relocations of Station #1 at Training Site Three**

This strategy would involve the abandonment of the current fire station #1 and the establishment of a new fire station #1 built in conjunction with a new Training Center on the proposed site #3 at **Stuhr Road** near its intersection with **Seedling Mile Road**. The strategy was designed and analyzed specifically for consideration by the City in order to conserve costs associated with site acquisition and development. This strategy should be considered if the City wishes to take advantage of having an active fire station at their fire training facility.

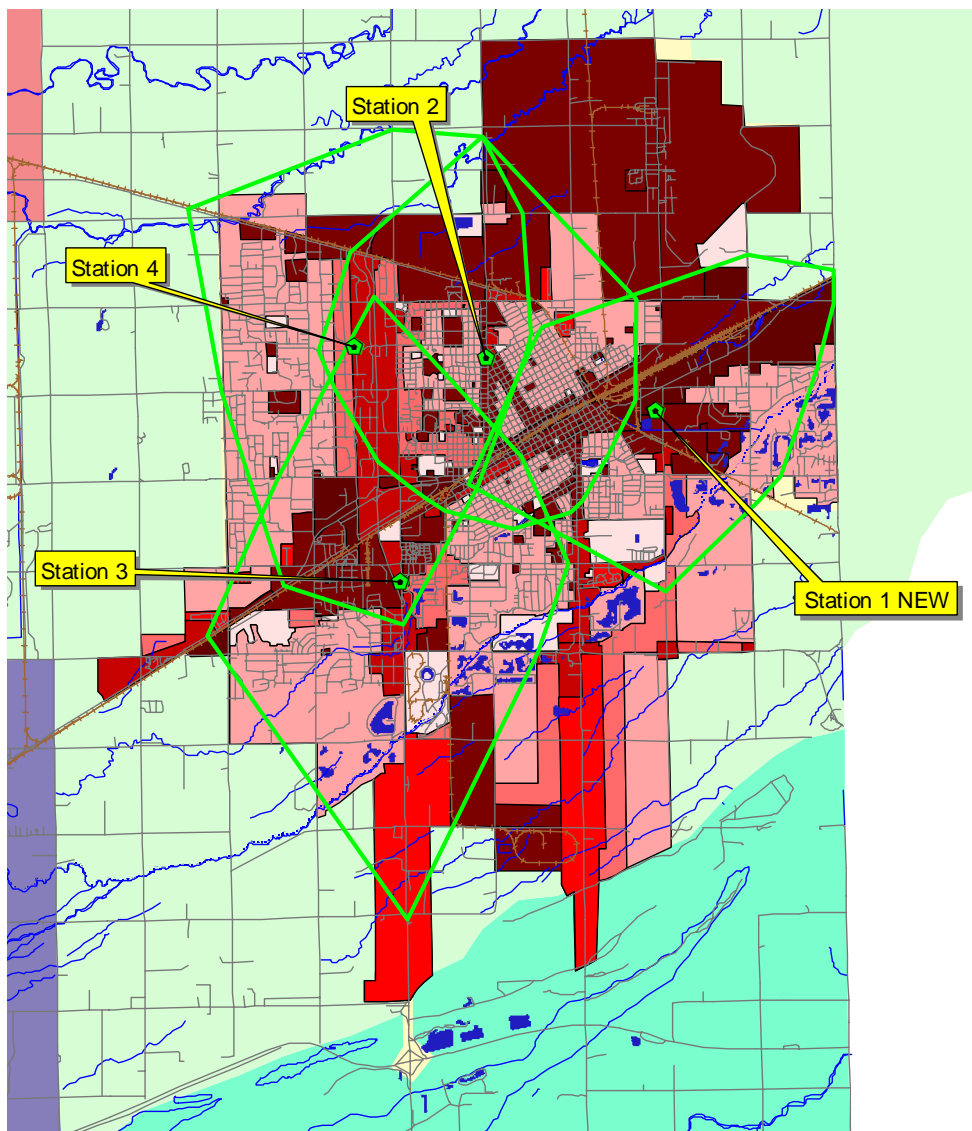
The following figure demonstrates this deployment strategy. The six-minute response capability of this proposed station deployment is shown in green overlays.

**Figure 29: Deployment Strategy "E"**



The following map demonstrates the six-minute coverage areas of each proposed station location overlaid on the community risk designations. This view permits the reader to visually appraise the depth of six-minute station coverages against areas of highest fire impact risk.

**Figure 30: Strategy E Coverage and Community Risk**



### **Strategy E Projected Performance**

This deployment strategy demonstrates slight degradation in target-level service performance when compared to what would be provided by the current deployment after projected community development. Performance models for the strategy, along with comparison figures, are shown in the following tables.

The first table provides the projected performance of this deployment strategy for the community as it exists today. The comparison figures are the current levels of service experienced by the community. Current service demand and the current street network were used in this analysis.

**Figure 31: Strategy "E" Performance Analysis**

<b>Performance Projection on Current City Streets and Service Demand</b>		
<b>Deployment Strategy</b>	<b>Percent of Service Demand &lt;6:00</b>	<b>Percent of Road Segments &lt;6:00</b>
Current Deployment Capability	95%	90%
Strategy "E"	92%	87%

The next table provides the projected performance of this deployment strategy were the community to develop to the full extent discussed in previous sections of this study. The comparison figures are the levels of service projected if current deployment is continued without change (status quo). Projected service demand and a projected street network similar in nature to that which may be present if the City develops as expected were used in this analysis.

<b>Performance Projection on Future Development and Service Demand</b>		
<b>Deployment Strategy</b>	<b>Percent of Service Demand &lt;6:00</b>	<b>Percent of Road Segments &lt;6:00</b>
Status Quo at Full Future Buildout	92%	73%
Strategy "E"	90%	81%

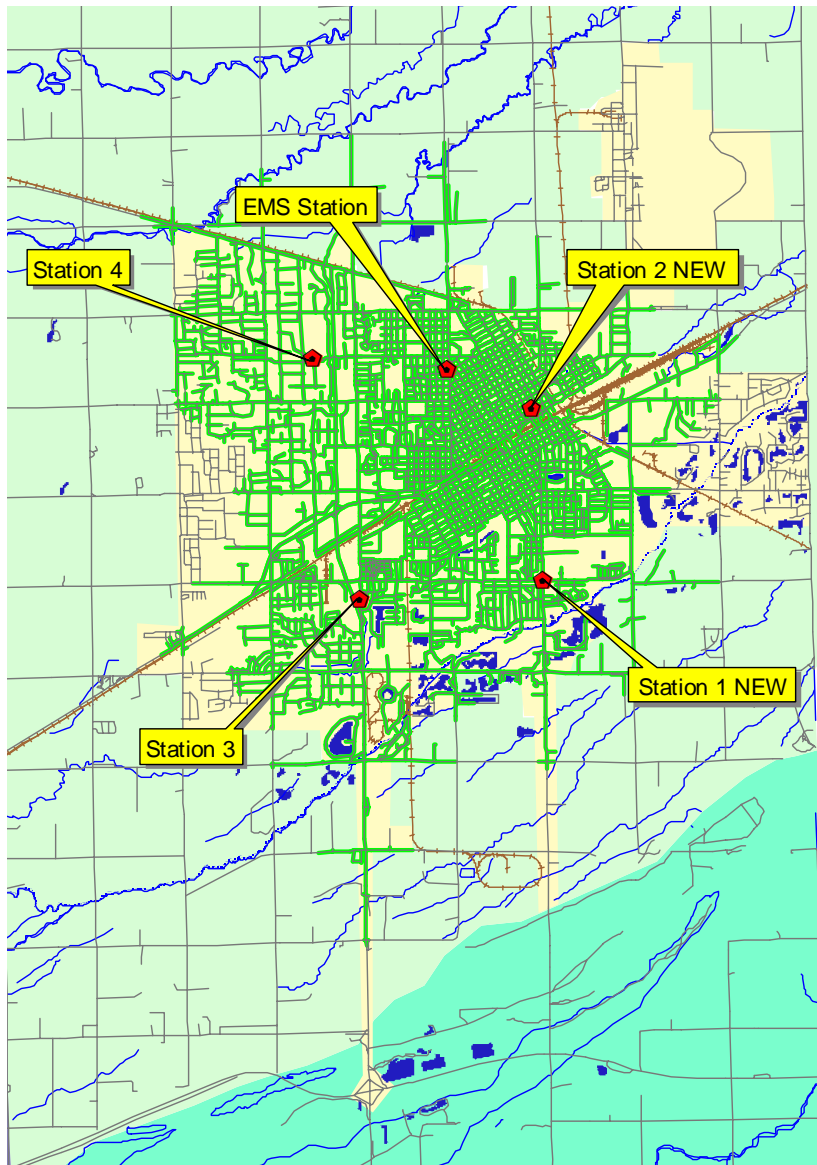
As can be seen in the table, response time performance, even after full community buildout, would be below six minutes for just 90% of all incidents. This strategy **will** achieve the target objective of six minutes or less to at least 90% of the incidents, but that performance achievement is likely to be marginal.

**Deployment Strategy F- Relocations of Station #1 and Station #2,  
Retention of Old Station #2 as EMS Station**

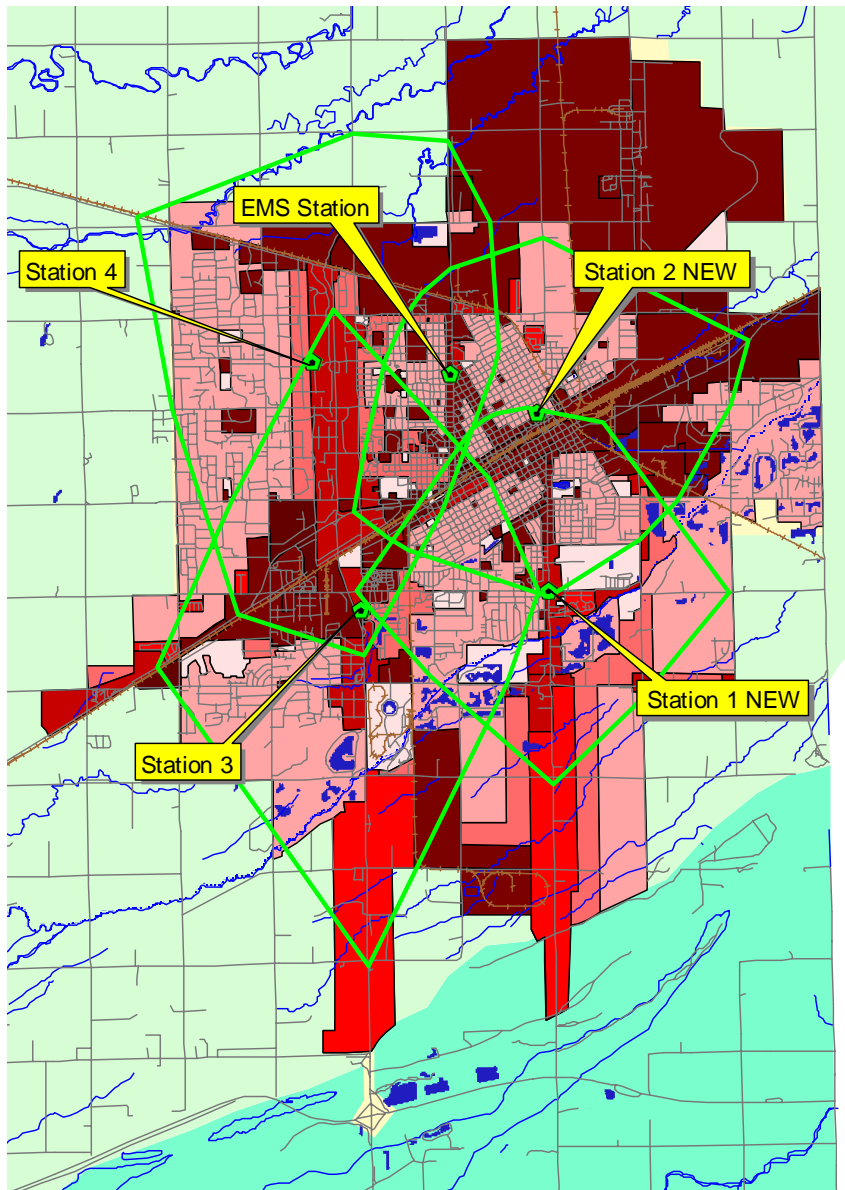
This strategy would involve the abandonment of the current fire station #1 and the establishment of a new fire station #1 near the intersection of **Locust Street and Stolley Park Road**. In addition, the deployment strategy would also call for relocation of Fire Station #2 to the area of **Sycamore Street and 5<sup>th</sup> Street**. However, the strategy would involve the continued use of the old Station #2 as an EMS station, from which transport ambulance crews would be dispatched.

The following figure demonstrates this deployment strategy. The six-minute response capability of fire suppression units (ambulance station excluded) for this proposed station deployment is shown in green overlays.



**Figure 32: Deployment Strategy "F"**

The following map demonstrates the six-minute coverage areas of each proposed fire suppression station location overlaid on the community risk designations. This view permits the reader to visually appraise the depth of six-minute station coverages against areas of highest fire impact risk.

**Figure 33: Strategy F Coverage and Community Risk****Strategy F Projected Performance**

This deployment strategy demonstrates improvement in target-level service performance when compared to what would be provided by the current deployment after projected community development. Performance models for the strategy, along with comparison figures, are shown in the following tables.

The first table provides the projected performance of this deployment strategy for the community as it exists today. The comparison figures are the current levels of service experienced by the community. Current service demand and the current street network were used in this analysis.

**Figure 34: Strategy "F" Performance Analysis**

<b>Performance Projection on Current City Streets and Service Demand</b>		
<b>Deployment Strategy</b>	<b>Percent of Service Demand</b>	<b>Percent of Road Segments</b>
	<b>&lt;6:00</b>	<b>&lt;6:00</b>
Current Deployment Capability	95%	90%
Strategy "F"	99%	93%

The next table provides the projected performance of this deployment strategy were the community to develop to the full extent discussed in previous sections of this study. The comparison figures are the levels of service projected if current deployment is continued without change (status quo). Projected service demand and a projected street network similar in nature to that which may be present if the City develops as expected were used in this analysis.

<b>Performance Projection on Future Development and Service Demand</b>		
<b>Deployment Strategy</b>	<b>Percent of Service Demand</b>	<b>Percent of Road Segments</b>
	<b>&lt;6:00</b>	<b>&lt;6:00</b>
Status Quo at Full Future Buildout	92%	73%
Strategy "F"	94%	84%

As can be seen in the table, response time performance, even after full community buildout, would be below six minutes for well over 90% of all incidents. This strategy **will** achieve the target objective of six minutes or less to at least 90% of the incidents.

## FINDINGS AND CONCLUSIONS

In the long-range future, upon full development and buildout of its response territory, the Grand Island City Fire Department will be able to maintain the response time performance objective adopted for the City for first-due company arrival of 6:00 or less through continued use of its existing location deployment scheme, if desired. After anticipated development, response time performance levels could be expected to degrade by approximately only 3%.

The City of Grand Island can also meet the response time performance objective through the adoption of one of the deployment strategies provided in this report involving the use of new locations. The summary of six-minute response time performance projections for each strategy is shown in the figure below.

**Figure 35: Deployment Strategy Performance Projection Summary**

Performance Projection on Future Development and Service Demand		
Deployment Strategy	Percent of Service Demand	Percent of Road Segments
	<6:00	<6:00
Status Quo at Full Future Buildout	92%	73%
Strategy "A"	93%	82%
Strategy "B"	91%	82%
Strategy "C"	93%	82%
Strategy "D"	92%	85%
Strategy "E"	90%	81%
Strategy "F"	94%	84%

From the table, it can be seen that Strategy F provides the most significant projected improvement over what would exist if use of the current deployment locations were continued. Strategies A and C provide the potential for slight performance improvement, but all six deployment strategies show only small variation in projected performance. This is a good indication that the City has the flexibility to adopt any one of the adopted strategies without fear of causing significant deterioration of service levels. Each strategy could be expected to provide a first unit arrival of six minutes or less.

In cases such as this, it is sometimes helpful to analyze the anticipated performance of each strategy at a lower response time model. While each strategy may meet the stated performance objective of six minutes, one or more strategies may show a distinct advantage in response time performance at a lower level, such as four minutes.

The following figure provides the projected performance of each strategy if a four-minute response time objective is analyzed through GIS.

**Figure 36: Projected Performance of All Strategies at Four Minutes**

<b>Performance Projection on Current City Streets and Service Demand</b>		
<b>Deployment Strategy</b>	<b>Percent of Service Demand &lt;4:00</b>	<b>Percent of Road Segments &lt;4:00</b>
Strategy "A"	81%	61%
Strategy "B"	80%	61%
Strategy "C"	70%	48%
Strategy "D"	40%	36%
Strategy "E"	69%	47%
Strategy "F"	84%	58%
<b>Performance Projection on Future Development and Service Demand</b>		
<b>Deployment Strategy</b>	<b>Percent of Service Demand &lt;4:00</b>	<b>Percent of Road Segments &lt;4:00</b>
Strategy "A"	75%	54%
Strategy "B"	74%	53%
Strategy "C"	67%	43%
Strategy "D"	43%	34%
Strategy "E"	66%	43%
Strategy "F"	78%	51%

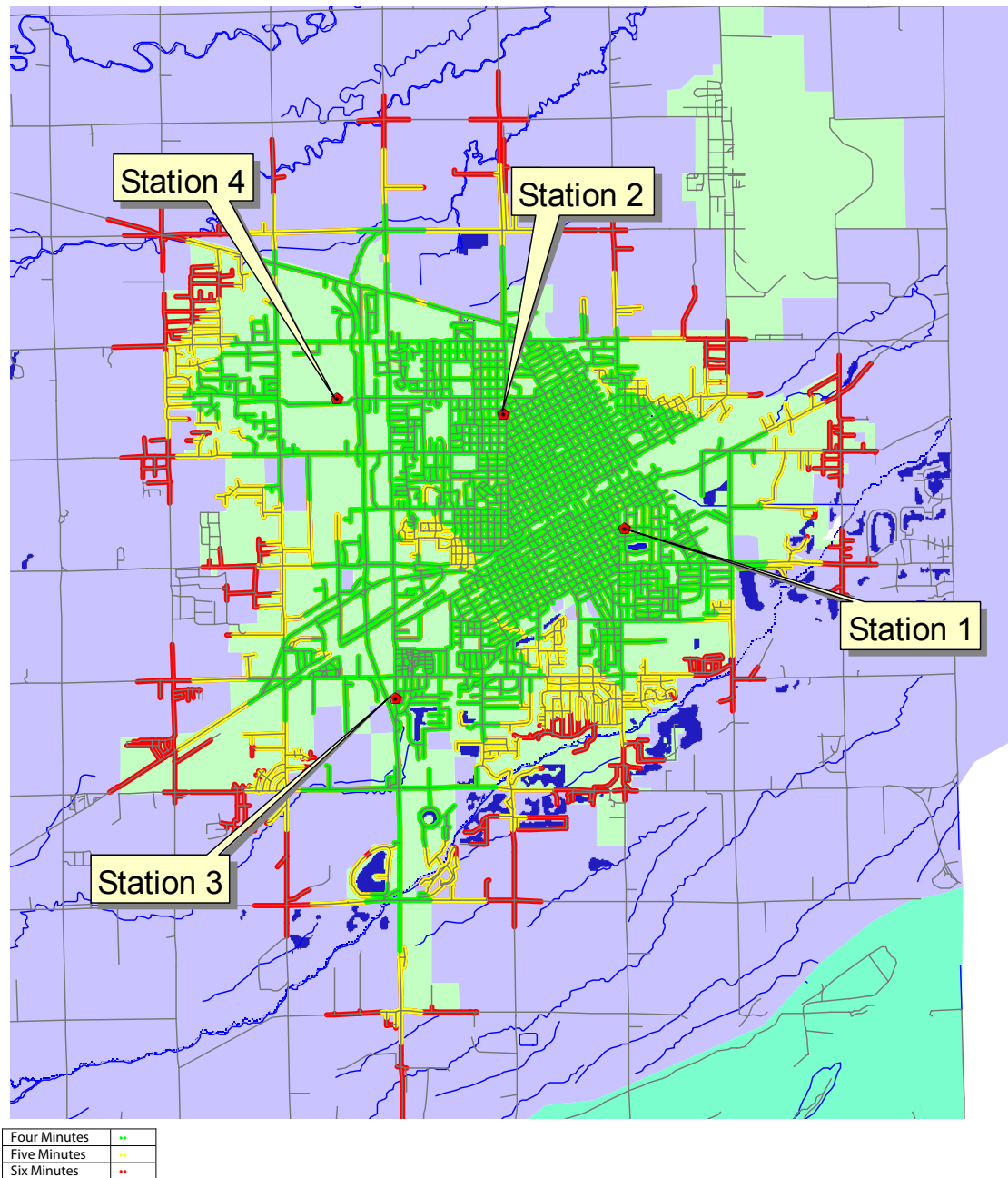
These figures demonstrate that Strategy D is the least desirable from a short-time response performance standpoint. Thus, it should only be considered in the event that airport development will make it necessary to locate a station on or near airport property. Strategy E is the next least desirable from a short-time response performance standpoint, but could result in much lower capital costs since the new station would be combined with the Training Center site.

The figures also demonstrate that Strategy F can be expected to provide the greatest response time benefit to the largest number of service users. Strategies A and B can be expected to provide a three to four percent lower performance at the four-minute level than Strategy F. The difference between the projected performances of the three strategies is reasonably minor and the City should feel comfortable making the final location decision between these strategies based on other issues unrelated to service performance such as cost, land availability, site suitability, and roadway access.



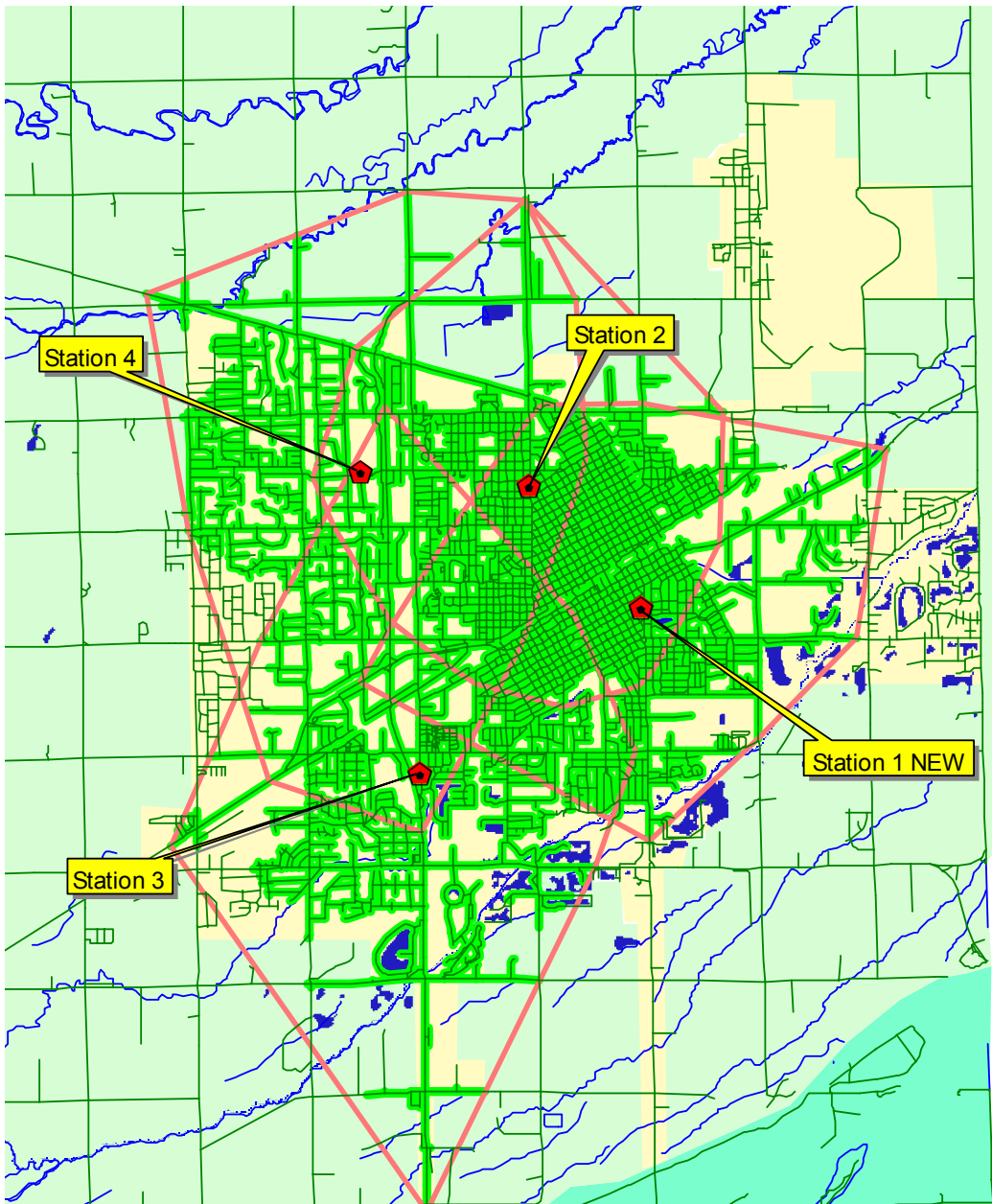
## **MAP APPENDIX**

### Current Station Deployment and Response Time Capability



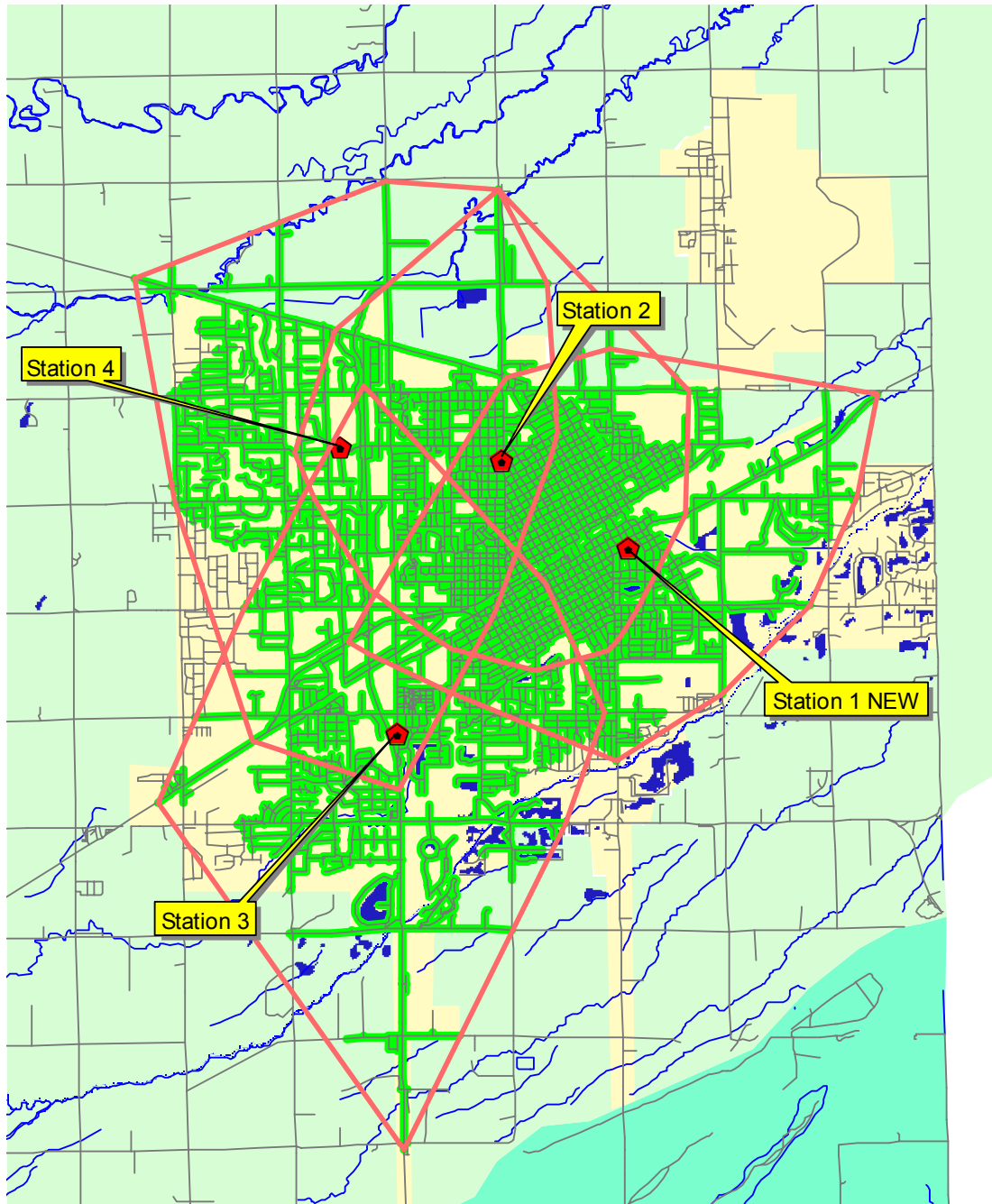
02.25.05

### Strategy "A" Six-Minute Response Time Performance



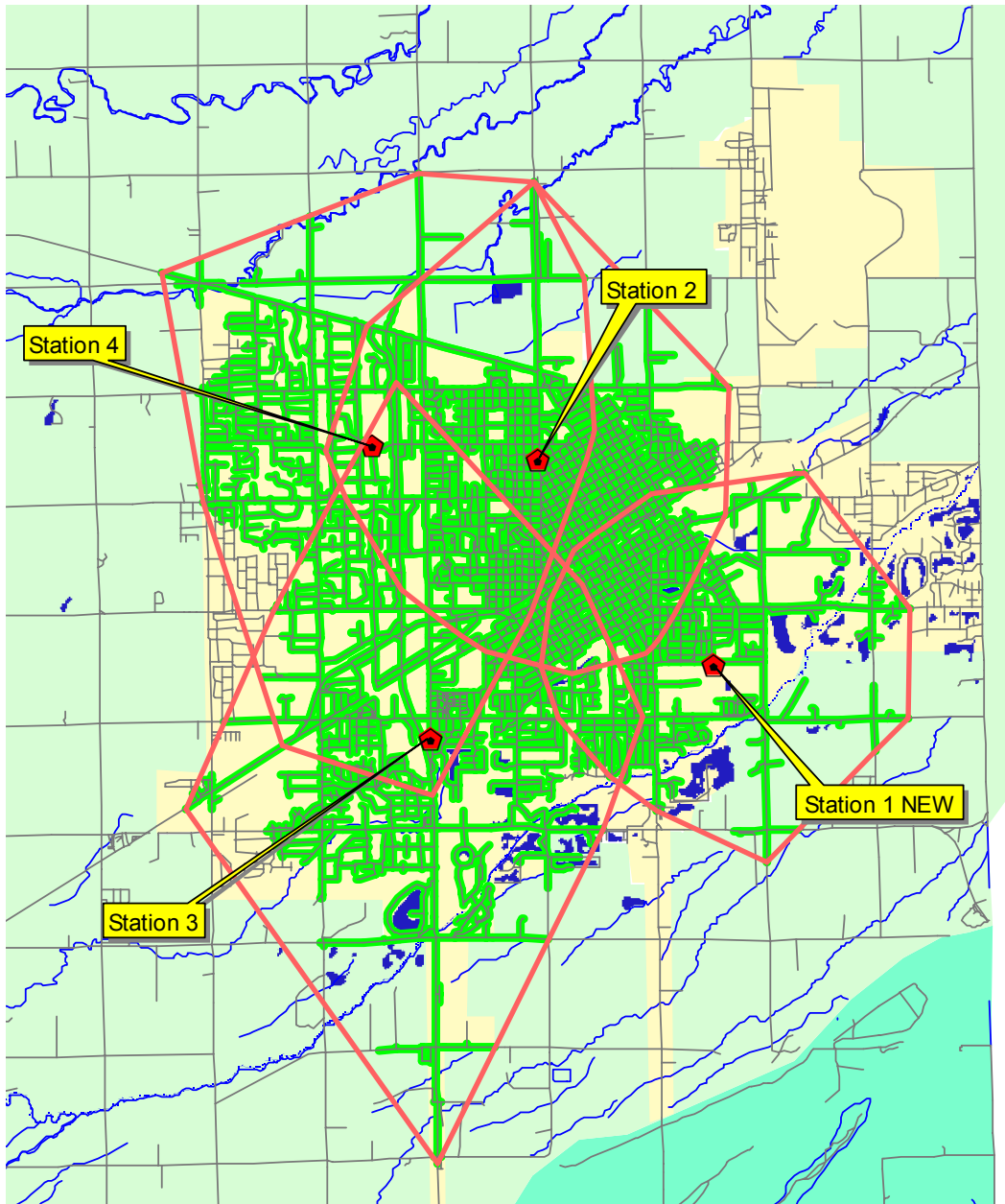
02.25.05

### Strategy "B" Six-Minute Response Time Performance

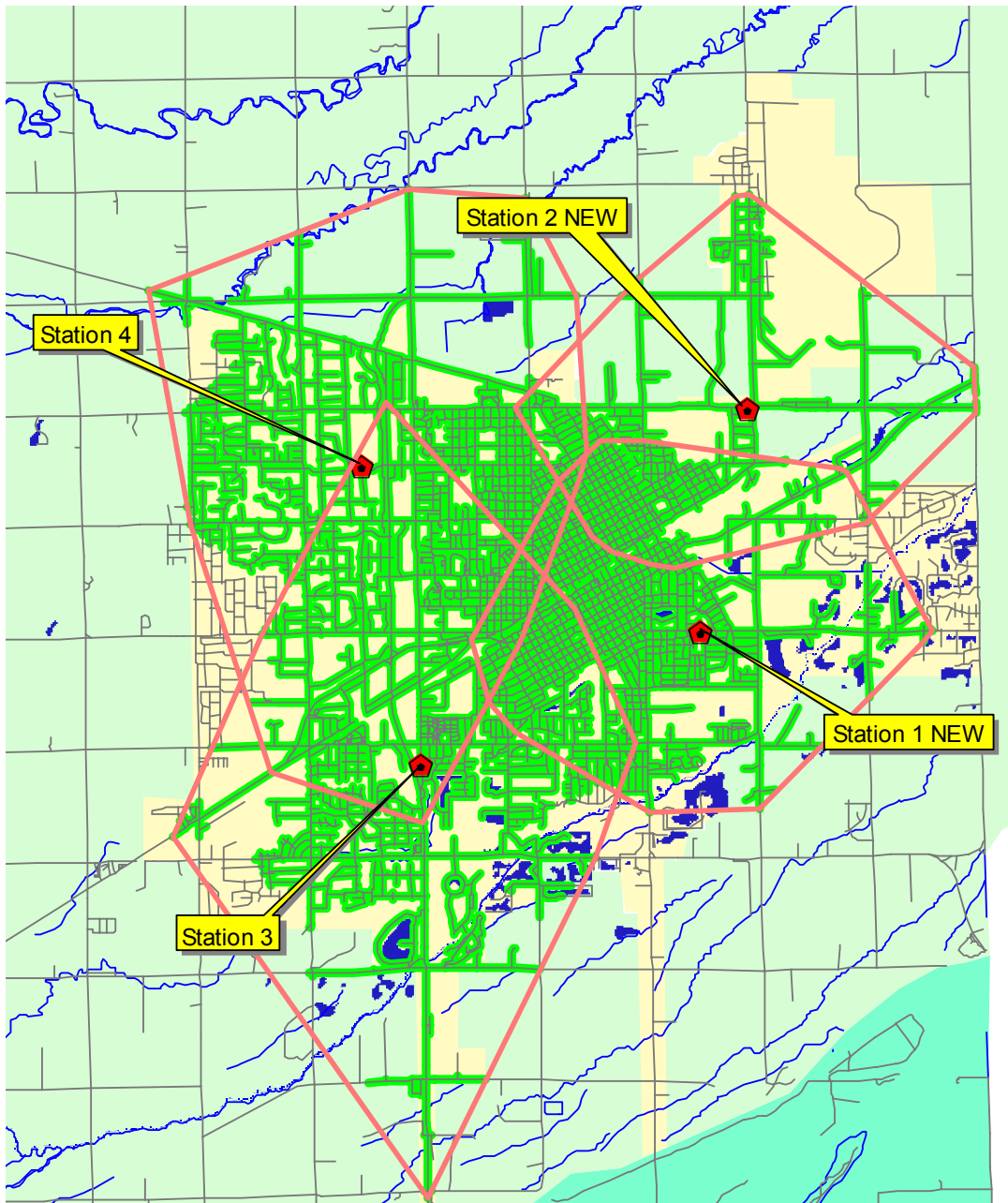


02.25.05

### Strategy "C" Six-Minute Response Time Performance

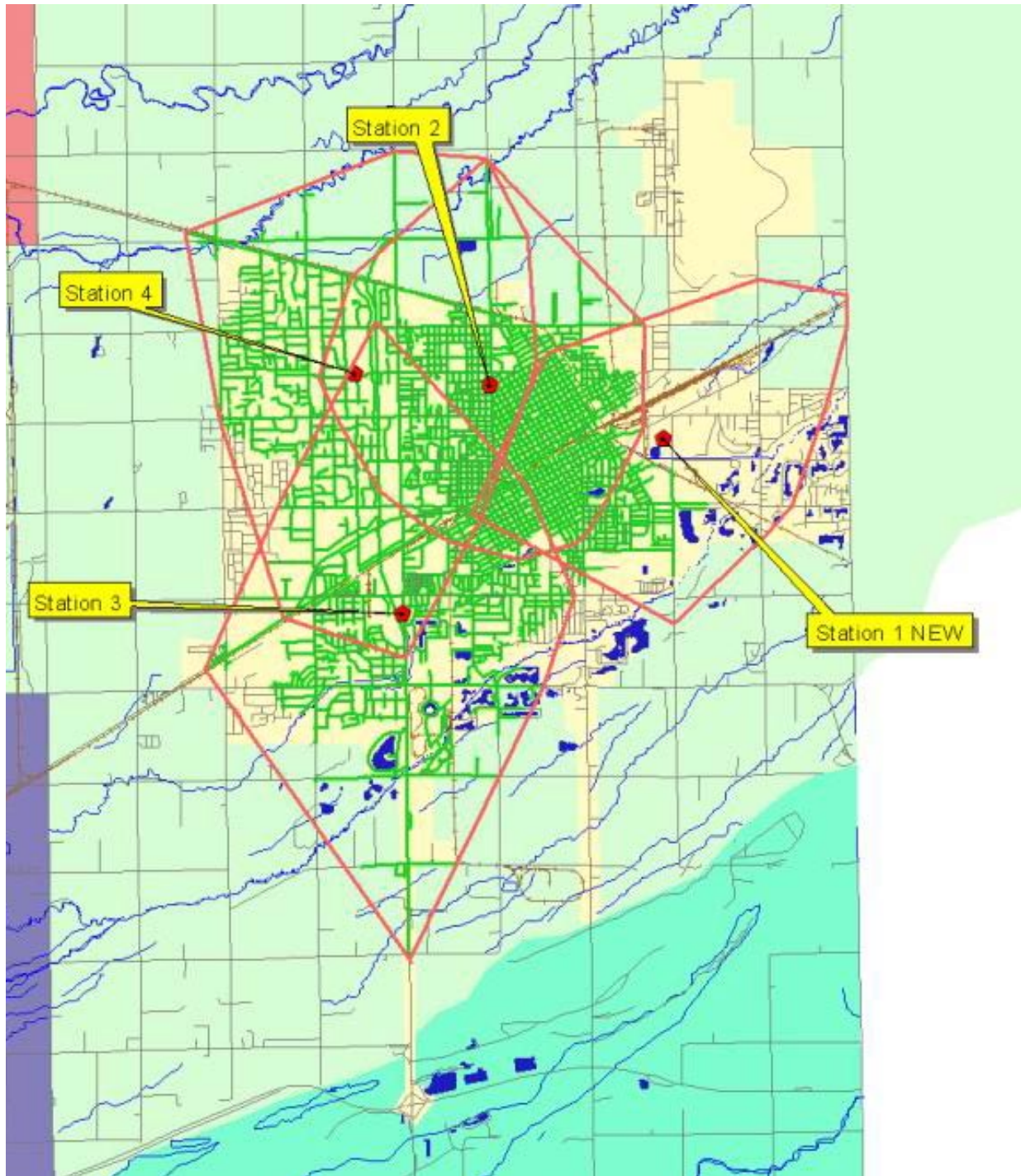


### Strategy "D" Six-Minute Response Time Performance



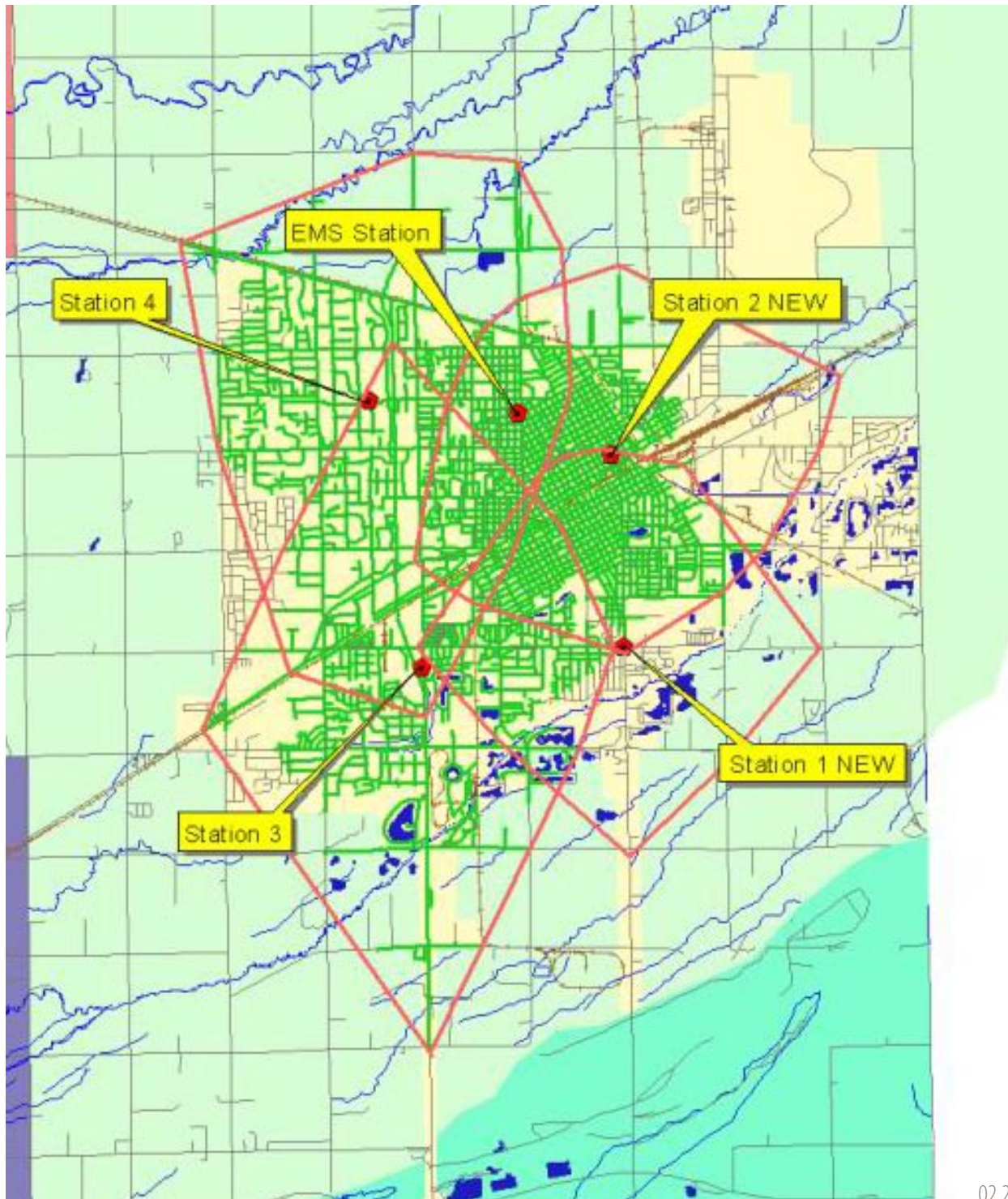


## Strategy “E” Six-Minute Response Time Performance



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### Strategy "F" Six-Minute Response Time Performance



02.25.05



04



## Fire Station Space Program

## SPACE PROGRAM

The following are Architectural Space Programs for implementation of Fire Station site strategies. The programs were developed during a workshop session on December 15th, 16th, and 17th with Fire Department and City Leadership. The programs were developed through one-on-one interviews with departmental leadership, and were based on Programming Questionnaires which are included in an appendix of this report. The areas indicated for each space are based on the Space Standard Diagrams included in this section. The space programs were used in developing the concept station plans and site “fit” plans detailed in this section and which formed the basis of the site Master Plan concepts included in this report.

The final programs included are:

- *Option 1 and 2* – Headquarters Station including Fire Administration and (5) bay Fire Station (full program included in this report)
- *Option 3A* – Fire Administration with (2) bay satellite station (summary of space program only included in this report)
- *Option 3B* – (5) bay Fire Station without Fire Administration (summary of space program only included in this report)
- *Option 4* – (3) bay Fire Station without Fire Administration (summary of space program only included in this report)

Programs 1 and 2, and summary pages for 3A, 3B, and 4 follows:

# GRAND ISLAND FIRE DEPARTMENT SITE AND NEEDS STUDY

## Fire Station

## SPACE PROGRAM

OPTION 1 AND 2 GRAND ISLAND HEADQUARTER (5) BAY FIRE STATION GRAND ISLAND, NEBRASKA					SPACE PROGRAM					SUPPORT				
SPACE NEEDS ASSESSMENT										COMM.#: 1637.01				
DATE: February 3, 2005										BKV GROUP				
SPACE SHEET CODE	DEPARTMENT: SITE REQUIREMENTS	REQUIRED NUMBER OF SPACES			NET UNIT	NET AREA REQUIRED			COMMENTS					
		2005	5-YR.	10-YR.		2005 PROJECTED	5-YR. PROJECTED	10-YR. PROJECTED						
Support Areas														
	Emergency Generator	1	1	1	-	-	-	-	Exterior location with screen					
	Public Parking Stalls	12	12	12	-	-	-	-	Exterior location					
	Staff Parking Stalls	35	35	35	-	-	-	-	Exterior location					
	Vehicle Pad	2	2	2	-	-	-	-	Exterior locations at front and back					
	Staff Picnic Area	1	1	1	-	-	-	-	Exterior location with screening					
	Fire Hydrant	2	2	2	-	-	-	-	Locate for training and functional					
Subtotal, Departmental Spaces						-	-	-						
Total Net SF						-	-	-						
Efficiency Factor					15%	-	-	-						
TOTAL PROPOSED/PROJECTED OCCUPIABLE						-	-	-						

OPTION 1 AND 2 GRAND ISLAND HEADQUARTER (5) BAY FIRE STATION GRAND ISLAND, NEBRASKA					SPACE PROGRAM				FIRE ADMINISTRATION				
SPACE NEEDS ASSESSMENT									COMM.#: 1637.01 BKV GROUP				
DATE: February 3, 2005													
SPACE SHEET CODE	DEPARTMENT:	REQUIRED NUMBER OF SPACES			NET UNIT	NET AREA REQUIRED			COMMENTS				
	FIRE ADMINISTRATION	2005	5-YR.	10-YR.		2005 PROJECTED	5-YR. PROJECTED	10-YR. PROJECTED					
Personnel Spaces													
O-192	Fire Chief's Office	1	1	1	192	192	192	192					
O-168DT	Fire Prevention Division Chief's Office	1	1	1	168	168	168	168					
O-168	Training Division Chief's Office	1	1	1	168	168	168	168					
O-168DT	Operations Division Chief's Office	1	1	1	168	168	168	168					
O-168	EMS Division Chief's Office	1	1	1	168	168	168	168					
O-144	Shift Commanders' Office	1	1	1	144	144	144	144	Shared each shift				
O-144	EMS Shift Office	1	1	1	144	144	144	144	Shared each shift				
O-120	Public Safety Secretary	1	1	1	120	120	120	120					
W-64	Clerical	2	2	2	64	128	128	128					
W-64	Fire inspectors	3	3	3	64	192	192	192					
Subtotal, Personnel Spaces		13	13	13		1,592	1,592	1,592					
Departmental Spaces													
R-450	Public Vestibule / Lobby	1	1	1	450	450	450	450					
A-196PR	Plan Review Area	1	1	1	196	196	196	196					
A-120A	Mail / Copy Area	1	1	1	120	120	120	120					
R-130	File Room	1	1	1	130	130	130	130					
R-80E	Fire Prevention Storage	1	1	1	80	80	80	80	Adjacent to Prevention Chief's Office				
R-195	Break Room	1	1	1	195	195	195	195					
C-280	Conference Room	1	1	1	280	280	280	280	Adjacent to Chief's Office				
R-171	Public toilets	1	1	1	171	171	171	171	Adjacent to Lobby / Training Room				
Subtotal, Departmental Spaces						1,622	1,622	1,622					
Total Net SF						3,214	3,214	3,214					
Efficiency Factor					20%	804	804	804					
TOTAL PROPOSED/PROJECTED OCCUPIABLE						4,018	4,018	4,018					

(O)Office (W)Workstation (R)Room (A)Area (L)Lobby (SW)Shared Workstation (M)Millwork

02.25.05

# GRAND ISLAND FIRE DEPARTMENT SITE AND NEEDS STUDY

## Fire Station

# SPACE PROGRAM

OPTION 1 AND 2 GRAND ISLAND HEADQUARTER (5) BAY FIRE STATION GRAND ISLAND, NEBRASKA		SPACE PROGRAM					APPARATUS		
SPACE NEEDS ASSESSMENT							COMM.#: 1637.01 BKV GROUP		
DATE: February 3, 2005									
SPACE SHEET CODE	DEPARTMENT:	REQUIRED NUMBER OF SPACES			NET UNIT	NET AREA REQUIRED			COMMENTS
	STATION ADMINISTRATION	2005	5-YR.	10-YR.		2005 PROJECTED	5-YR. PROJECTED	10-YR. PROJECTED	
<b>Personnel Spaces</b>									
R-192	Captain's Office / Base Room	1	1	1	240	240	240	240	Shared each shift
W-36	EMS Workstation	1	1	1	36	36	36	36	Shared by EMS
W-36	Report / Shared Workstation	1	1	1	36	36	36	36	Shared by firefighters
<b>Subtotal, Personnel Spaces</b>		<b>3</b>	<b>3</b>	<b>3</b>	<b>-</b>	<b>312</b>	<b>312</b>	<b>312</b>	
<b>Departmental Spaces</b>									
R-120C	Station Public Entry / Lobby	1	1	1	120	120	120	120	Includes seats for waiting
R-96	Work / Copy	1	1	1	96	96	96	96	
<b>Subtotal, Departmental Spaces</b>						<b>216</b>	<b>216</b>	<b>216</b>	
<b>Total Net SF</b>						<b>528</b>	<b>528</b>	<b>528</b>	
<b>Efficiency Factor</b>					<b>20%</b>	<b>132</b>	<b>132</b>	<b>132</b>	
<b>TOTAL PROPOSED/PROJECTED OCCUPIABLE</b>						<b>660</b>	<b>660</b>	<b>660</b>	

OPTION 1 AND 2 GRAND ISLAND HEADQUARTER (5) BAY FIRE STATION GRAND ISLAND, NEBRASKA		SPACE PROGRAM					APPARATUS		
SPACE NEEDS ASSESSMENT							COMM.#: 1637.01		
DATE: February 3, 2005							BKV GROUP		
SPACE SHEET CODE	DEPARTMENT:	REQUIRED NUMBER OF SPACES			NET UNIT	NET AREA REQUIRED			COMMENTS
	APPARATUS	2005	5-YR.	10-YR.		2005 PROJECTED	5-YR. PROJECTED	10-YR. PROJECTED	
<b>Personnel Spaces</b>									
<b>Subtotal, Personnel Spaces</b>		-	-	-	-	-	-	-	
<b>Departmental Spaces</b>									
R-7840	Apparatus Bays	1	1	1	7,840	7,840	7,840	7,840	Include Fire Pole in space (functional or display)
R-594	Turn Out	1	1	1	594	594	594	594	
	Turn Out Gear Maintenance	1	1	1	-	-	-	-	Included in Turn Out
	Wash Room	1	1	1	-	-	-	-	Included in Turn Out
	Eye Wash	1	1	1	-	-	-	-	Included in Turn Out
R-102	Maintenance Workroom	1	1	1	102	102	102	102	
R-334	SCBA Room	1	1	1	334	334	334	334	
R-80E	EMS Oxygen fill and storage	1	1	1	80	80	80	80	Provide mezz above
R-36E	Delivery Vestibule	1	1	1	36	36	36	36	Adj to Ap bay
R-119	EMS Storage	1	1	1	119	119	119	119	Provide mezz above
R-80D	EMS Clean-up Room	1	1	1	80	80	80	80	Provide mezz above
R-80F	Liquid Storage	1	1	1	80	80	80	80	Provide mezz above
R-80G	Arson Evidence Storage	1	1	1	80	80	80	80	Provide mezz above
R-144	General Storage	1	1	1	144	144	144	144	Provide mezz above
<b>Subtotal, Departmental Spaces</b>						<b>9,489</b>	<b>9,489</b>	<b>9,489</b>	
<b>Total Net SF</b>						<b>9,489</b>	<b>9,489</b>	<b>9,489</b>	
<b>Efficiency Factor</b>					<b>10%</b>	<b>1,054</b>	<b>1,054</b>	<b>1,054</b>	
<b>TOTAL PROPOSED/PROJECTED OCCUPIABLE</b>						<b>10,543</b>	<b>10,543</b>	<b>10,543</b>	

(O)Office (W)Workstation (R)Room (A)Area (L)Lobby (SW)Shared Workstation (M)Millwork

02.25.05



# GRAND ISLAND FIRE DEPARTMENT SITE AND NEEDS STUDY

## Fire Station

## SPACE PROGRAM

OPTION 1 AND 2 GRAND ISLAND HEADQUARTER (5) BAY FIRE STATION GRAND ISLAND, NEBRASKA SPACE NEEDS ASSESSMENT		SPACE PROGRAM				SUPPORT			
DATE: February 3, 2005						COMM.#: 1637.01 BKV GROUP			
SPACE SHEET CODE	DEPARTMENT:	REQUIRED NUMBER OF SPACES			NET UNIT	NET AREA REQUIRED			COMMENTS
	STAFF SUPPORT	2005	5-YR.	10-YR.		2005 PROJECTED	5-YR. PROJECTED	10-YR. PROJECTED	
<b>Staff Areas</b>									
R-40	Staff Entry / Vestibule	1	1	1	40	40	40	40	Locate adj to bunk rooms
R-58	Bunk Room	10	10	10	58	580	580	580	
R-16	Linen closet	1	1	1	16	16	16	16	
R-928	Locker Room	1	1	1	928	928	928	928	
	Changing / Shower	1	1	1	-	-	-	-	
	Men's Toilet	1	1	1	-	-	-	-	
	Women's Toilet	1	1	1	-	-	-	-	
	Laundry	1	1	1	-	-	-	-	
R-384	Dayroom / Lounge	1	1	1	384	384	384	384	
R-1018	Community / EOC Room	1	1	1	1,018	1,018	1,018	1,018	
	A/V Teleconference Storage	1	1	1	-	-	-	-	Provide for Teleconf closet room
	Training Storage	1	1	1	-	-	-	-	Included in Training
R-323	Kitchen	1	1	1	323	323	323	323	locate adj to training and dayroom
R-545	Exersize Room	1	1	1	545	545	545	545	
R-280	Library	1	1	1	280	280	280	280	
Subtotal, Departmental Spaces						4,114	4,114	4,114	
Total Net SF						4,114	4,114	4,114	
Efficiency Factor					20%	1,029	1,029	1,029	
TOTAL PROPOSED/PROJECTED OCCUPIABLE						5,143	5,143	5,143	

R-350	Dormitory	1	1	1	350	350	350	350	Add Closets???		
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OPTION 1 AND 2 GRAND ISLAND HEADQUARTER (5) BAY FIRE STATION GRAND ISLAND, NEBRASKA SPACE NEEDS ASSESSMENT				SPACE PROGRAM				SUPPORT			
DATE: February 3, 2005								COMM.#: 1637.01 BKV GROUP			
SPACE SHEET CODE	DEPARTMENT:	REQUIRED NUMBER OF SPACES			NET UNIT	NET AREA REQUIRED			COMMENTS		
	BUILDING SUPPORT	2005	5-YR.	10-YR.		2005 PROJECTED	5-YR. PROJECTED	10-YR. PROJECTED			
Support Areas											
R-48A	Janitorial Storage	2	2	2	48	96	96	96			
R-42B	Telephone / Data Room	2	2	2	42	84	84	84			
R-500	Mechanical Room	1	1	1	500	500	500	500			
R-150	Electrical Room	1	1	1	150	150	150	150			
Subtotal, Departmental Spaces						830	830	830			
Total Net SF						830	830	830			
Efficiency Factor					15%	146	146	146			
TOTAL PROPOSED/PROJECTED OCCUPIABLE						976	976	976			

## Fire Station

SPACE  
PROGRAM

OPTION 1 AND 2		SPACE PROGRAM				SUPPORT			
GRAND ISLAND HEADQUARTER									
(5) BAY FIRE STATION									
GRAND ISLAND, NEBRASKA									
SPACE NEEDS ASSESSMENT						COMM.#: 1637.01			
DATE: February 3, 2005						BKV GROUP			
SPACE SHEET CODE	DEPARTMENT:	REQUIRED NUMBER OF SPACES			NET UNIT	NET AREA REQUIRED			COMMENTS
	SITE REQUIREMENTS	2005	5-YR.	10-YR.		2005 PROJECTED	5-YR. PROJECTED	10-YR. PROJECTED	
Support Areas									
	Emergency Generator	1	1	1	-	-	-	-	Exterior location with screen
	Public Parking Stalls	12	12	12	-	-	-	-	Exterior location
	Staff Parking Stalls	35	35	35	-	-	-	-	Exterior location
	Vehicle Pad	2	2	2	-	-	-	-	Exterior locations at front and back
	Staff Picnic Area	1	1	1	-	-	-	-	Exterior location with screening
	Fire Hydrant	2	2	2	-	-	-	-	Locate for training and functional
Subtotal, Departmental Spaces						-	-	-	
Total Net SF						-	-	-	
Efficiency Factor					15%	-	-	-	
TOTAL PROPOSED/PROJECTED OCCUPIABLE						-	-	-	

(O)Office (W)Workstation (R)Room (A)Area (L)Lobby (SW)Shared Workstation (M)Millwork

# GRAND ISLAND FIRE DEPARTMENT SITE AND NEEDS STUDY

## Fire Station

## SPACE PROGRAM

OPTION 3A FIRE ADMINISTRATION WITH (2) PARTIAL BAY SATILITE FIRE STATION GRAND ISLAND, NEBRASKA					SPACE PROGRAM					SUMMARY TOTALS				
SPACE NEEDS ASSESSMENT										COMM.#: 1637.01 BKV GROUP				
DATE: February 3, 2005														
SPACE SHEET CODE	DEPARTMENT:	PROJECTED NUMBER OF STAFF			NET UNIT	OCCUPIABLE AREA REQUIRED			COMMENTS	EXISTING				
	SUMMARY TOTAL	2005	5-YR	10-YR.		2005 PROJECTED	5-YR PROJECTED	10-YR. PROJECTED						
Departments														
	Fire Administration	13	13	13		4,018	4,018	4,018						
	Station Administration	3	3	3		510	510	510						
	Apparatus	-	-	-		2,249	2,249	2,249						
	Staff Support	-	-	-		1,960	1,960	1,960						
	Building Support	-	-	-		435	435	435						
	Site Requirements	-	-	-		-	-	-						
Total Usable SF						9,172	9,172	9,172						
Building Factor		15%				1,619	1,619	1,619						
TOTAL PROJECTED BUILDING GROSS AREA						10,790	10,790	10,790						

OPTION 3B (5) BAY FIRE STATION GRAND ISLAND, NEBRASKA					SPACE PROGRAM			SUMMARY TOTALS			
SPACE NEEDS ASSESSMENT								COMM.#: 1637.01 BKV GROUP			
DATE: February 3, 2005											
SPACE SHEET CODE	DEPARTMENT:	PROJECTED NUMBER OF STAFF			NET UNIT	OCCUPIABLE AREA REQUIRED			COMMENTS	EXISTING	
	SUMMARY TOTAL	2005	5-YR	10-YR		2005 PROJECTED	5-YR PROJECTED	10-YR. PROJECTED			
Departments											
	Station Administration	3	3	3		660	660	660			
	Apparatus	-	-	-		8,943	8,943	8,943			
	Staff Support	-	-	-		4,641	4,641	4,641			
	Building Support	-	-	-		871	871	871			
	Site Requirements	-	-	-		-	-	-			
Total Usable SF						15,115	15,115	15,115			
Building Factor		10%				1,679	1,679	1,679			
TOTAL PROJECTED BUILDING GROSS AREA						16,795	16,795	16,795			

OPTION 4 (3) BAY FIRE STATION GRAND ISLAND, NEBRASKA				SPACE PROGRAM				SUMMARY TOTALS			
SPACE NEEDS ASSESSMENT								COMM.#: 1637.01 BKV GROUP			
DATE:	February 3, 2005										
SPACE SHEET CODE	DEPARTMENT:	PROJECTED NUMBER OF STAFF			NET UNIT	OCCUPIABLE AREA REQUIRED			COMMENTS	EXISTING	
	SUMMARY TOTAL	2005	5-YR	10-YR		2005 PROJECTED	5-YR PROJECTED	10-YR. PROJECTED			
Departments											
	Station Administration	3	3	3		660	660	660			
	Apparatus	-	-	-		6,166	6,166	6,166			
	Staff Support	-	-	-		3,148	3,148	3,148			
	Building Support	-	-	-		871	871	871			
	Site Requirements	-	-	-		-	-	-			
Total Usable SF						10,844	10,844	10,844			
Building Factor		10%				1,205	1,205	1,205			
TOTAL PROJECTED BUILDING GROSS AREA						12,049	12,049	12,049			

02.25.05



## Fire Station Space Standard Diagrams

## SPACE STANDARDS

The following Architectural Space Standard Diagrams were developed during a workshop session on December 15th, 16th, and 17th with Fire Department and City Leadership. The diagrams provide an overview of programmatic requirements for all spaces of the facility options, but are not intended to be exhaustive, or final space designs. The space areas indicated on each space standard are used in the Space Programs to assure the highest degree of area projections. The diagrams themselves are used in the preliminary concept floor plans included in this section.

Space programs follow.

SPACE STANDARDS

FILE

6'-0"

COPPER

(50) MAIL SLOTS - 4"x10"x1"  
STACKED TWO HIGH

WALL CABINETS

BASH CABINETS

A-120A

20'-0"

PRINTER

PAK

OFFICE/WORKSTATION: OFFICE/WORKSTATION

DEPARTMENT: DEPARTMENT

AREA REQUIRED: SQ.FT.

FURNITURE OPTIONS:

☒ WORKSURFACE CORNER

☒ WORKSURFACE L SHAPED

☒ SHELVING

☒ CLOSED SHELVING

☒ TASKLIGHTS

☒ TACKBOARDS

☒ IN/OUT PAPER MGMT.

☒ TOOLBARS

☒ ADDITIONAL SEATING(QTY.)

☒ CONFERENCE TABLE

☒ MARKER BOARD

☒ FREE STANDING

☒ FREE STANDING

☒ FREE STANDING

☒ KEYBOARD

☒ BOX.BOX.FILE(QTY)

☒ FILE.FILE(QTY)

☒ LATERAL FILE

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING: LINEAL.FEET

LINEAL FEET OF STORAGE: LINEAL.FEET

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

☒ PHONE

☒ COMPUTER

☒ LAZER-PRINTER

☒ COPY/COLLATE

☒ SLIDE/OVERHEAD

☒ SHEDDER

☒ MICRO FICHE'

☒ CALCULATOR

☒ TASK LIGHTS

☒ PROJECTION SCREEN

☒ DATA OUTLETS

☒ OTHER

SPECIAL HVAC REQUIREMENTS

1. HVAC

2. HVAC

3. HVAC

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:

1. LINE1

LINE2

3. LINE1

LINE2

2. LINE1

LINE2

4. LINE1

LINE2

SECURITY REQUIRED: SECURITY.REQUIRED

PROGRAMMING FORM

BKV GROUP

FILE

13'-4"

COUNTER TOP  
OVER PLAN  
FLAT FILES

SUPPLY  
CABINETS

OFFICE/WORKSTATION: PLAN REVIEW AREA

DEPARTMENT: DEPARTMENT

AREA REQUIRED: 196SQ.FT.

FURNITURE OPTIONS:

☒ WORKSURFACE CORNER

☒ WORKSURFACE L SHAPED

☒ SHELVING

☒ CLOSED SHELVING

☒ TASKLIGHTS

☒ TACKBOARDS

☒ IN/OUT PAPER MGMT.

☒ TOOLBARS

☒ ADDITIONAL SEATING(QTY.)

☒ CONFERENCE TABLE

☒ MARKER BOARD

☒ FREE STANDING

☒ FREE STANDING

☒ FREE STANDING

☒ KEYBOARD

☒ BOX.BOX.FILE(QTY)

☒ FILE.FILE(QTY)

☒ LATERAL FILE

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING: LINEAL.FEET

LINEAL FEET OF STORAGE: LINEAL.FEET

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

☒ PHONE

☒ COMPUTER

☒ LAZER-PRINTER

☒ COPY/COLLATE

☒ SLIDE/OVERHEAD

☒ SHEDDER

☒ MICRO FICHE'

☒ CALCULATOR

☒ TASK LIGHTS

☒ PROJECTION SCREEN

☒ DATA OUTLETS

☒ OTHER

SPECIAL HVAC REQUIREMENTS

1. HVAC

2. HVAC

3. HVAC

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:

1. LINE1

LINE2

3. LINE1

LINE2

2. LINE1

LINE2

4. LINE1

LINE2

SECURITY REQUIRED: SECURITY.REQUIRED

02.25.05

80

## Fire Station

PROGRAMMING FORM

BKPV

## SPACE STANDARDS

<p>C-280</p> <p>MARKER BOARD</p>	<p>SPACE OR ROOM TYPE: DEPARTMENT:</p> <p>AREA REQUIRED:    280.SQ.FT</p> <p>FURNITURE OPTIONS:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> SHELVING</li> <li><input type="checkbox"/> CONFERENCE-TABLE</li> <li><input type="checkbox"/> ADDITIONAL-SEATING(QTY)</li> <li><input type="checkbox"/> AV.CART</li> <li><input type="checkbox"/> OTHER</li> </ul> <p>MILLWORK OPTIONS:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> UPPER CABINETS/SHELVING OPEN/CLOSED:</li> <li><input type="checkbox"/> LOWER CABINETS OPEN/CLOSED:</li> </ul> <p>FILING AND STORAGE NEEDS:</p> <p>LINEAL FEET OF FILING: LINEAL FEET OF STORAGE:</p> <p>SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:</p> <table border="0"> <tr> <td><input type="checkbox"/> PHONE</td> <td><input type="checkbox"/> SHREDDER</td> </tr> <tr> <td><input type="checkbox"/> COMPUTER</td> <td><input type="checkbox"/> PROJECTION SCREEN</td> </tr> <tr> <td><input type="checkbox"/> LAZER-PRINTER</td> <td><input type="checkbox"/> MICROWAVE</td> </tr> <tr> <td><input type="checkbox"/> COPY/COLLATE</td> <td><input type="checkbox"/> STOVE</td> </tr> <tr> <td><input type="checkbox"/> SLIDE/OVERHEAD</td> <td><input type="checkbox"/> RANGE</td> </tr> <tr> <td><input type="checkbox"/> MICRO FICHE'</td> <td><input type="checkbox"/> COMPACTOR</td> </tr> <tr> <td><input type="checkbox"/> TASK LIGHTS</td> <td><input type="checkbox"/> REFRIGERATOR</td> </tr> <tr> <td><input type="checkbox"/> ERASER BOARD</td> <td><input type="checkbox"/> OTHER</td> </tr> </table> <p>SPECIAL HVAC REQUIREMENTS</p> <table border="0"> <tr> <td><input type="checkbox"/> SINK</td> <td><input type="checkbox"/> DISPOSAL</td> </tr> <tr> <td><input type="checkbox"/> DISHWASHER</td> <td><input type="checkbox"/> OTHER</td> </tr> </table> <p>CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:</p> <table border="0"> <tr> <td>1.</td> <td>3.</td> </tr> <tr> <td>2.</td> <td>4.</td> </tr> </table> <p>SECURITY REQUIRED:</p>	<input type="checkbox"/> PHONE	<input type="checkbox"/> SHREDDER	<input type="checkbox"/> COMPUTER	<input type="checkbox"/> PROJECTION SCREEN	<input type="checkbox"/> LAZER-PRINTER	<input type="checkbox"/> MICROWAVE	<input type="checkbox"/> COPY/COLLATE	<input type="checkbox"/> STOVE	<input type="checkbox"/> SLIDE/OVERHEAD	<input type="checkbox"/> RANGE	<input type="checkbox"/> MICRO FICHE'	<input type="checkbox"/> COMPACTOR	<input type="checkbox"/> TASK LIGHTS	<input type="checkbox"/> REFRIGERATOR	<input type="checkbox"/> ERASER BOARD	<input type="checkbox"/> OTHER	<input type="checkbox"/> SINK	<input type="checkbox"/> DISPOSAL	<input type="checkbox"/> DISHWASHER	<input type="checkbox"/> OTHER	1.	3.	2.	4.
<input type="checkbox"/> PHONE	<input type="checkbox"/> SHREDDER																								
<input type="checkbox"/> COMPUTER	<input type="checkbox"/> PROJECTION SCREEN																								
<input type="checkbox"/> LAZER-PRINTER	<input type="checkbox"/> MICROWAVE																								
<input type="checkbox"/> COPY/COLLATE	<input type="checkbox"/> STOVE																								
<input type="checkbox"/> SLIDE/OVERHEAD	<input type="checkbox"/> RANGE																								
<input type="checkbox"/> MICRO FICHE'	<input type="checkbox"/> COMPACTOR																								
<input type="checkbox"/> TASK LIGHTS	<input type="checkbox"/> REFRIGERATOR																								
<input type="checkbox"/> ERASER BOARD	<input type="checkbox"/> OTHER																								
<input type="checkbox"/> SINK	<input type="checkbox"/> DISPOSAL																								
<input type="checkbox"/> DISHWASHER	<input type="checkbox"/> OTHER																								
1.	3.																								
2.	4.																								

PROGRAMMING FORM

BKV GROUP

I:/OFFICE/0-120

1/OFFICE/0-120	
	<p>OFFICE/WORKSTATION: <u>OFFICE</u></p> <p>DEPARTMENT:</p> <p>AREA REQUIRED: <u>120SQ.FT.</u></p>
	<p>FURNITURE OPTIONS:</p> <p><input type="checkbox"/> WORKSURFACE CORNER</p> <p><input type="checkbox"/> WORKSURFACE L SHAPED</p> <p><input type="checkbox"/> SHELVING <input type="checkbox"/> FREE STANDING <input type="checkbox"/> WALL MOUNTED</p> <p><input type="checkbox"/> CLOSED SHELVING <input type="checkbox"/> FREE STANDING <input type="checkbox"/> WALL MOUNTED</p> <p><input type="checkbox"/> TASKLIGHTS</p> <p><input type="checkbox"/> TACKBOARDS</p> <p><input type="checkbox"/> IN/OUT PAPER MGMT.</p> <p><input type="checkbox"/> TOOLBARS</p> <p><input type="checkbox"/> ADDITIONAL SEATING(QTY.)</p> <p><input type="checkbox"/> CONFERENCE TABLE</p> <p><input type="checkbox"/> MARKER BOARD</p>
	<p><input type="checkbox"/> KEYBOARD</p> <p><input type="checkbox"/> BOX.BOX.FILE(QTY.)</p> <p><input type="checkbox"/> FILE.FILE(QTY.)</p> <p><input type="checkbox"/> LATERAL FILE</p>
	<p>FILING AND STORAGE NEEDS:</p> <p>LINEAL FEET OF FILING:</p> <p>LINEAL FEET OF STORAGE:</p>
	<p>SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:</p> <p><input type="checkbox"/> PHONE <input type="checkbox"/> MICRO FICHE'</p> <p><input type="checkbox"/> COMPUTER <input type="checkbox"/> CALCULATOR</p> <p><input type="checkbox"/> LAZER-PRINTER <input type="checkbox"/> TASK LIGHTS</p> <p><input type="checkbox"/> COPY/COLLATE <input type="checkbox"/> PROJECTION SCREEN</p> <p><input type="checkbox"/> SLIDE/OVERHEAD <input type="checkbox"/> DATA OUTLETS</p> <p><input type="checkbox"/> SHEDDER <input type="checkbox"/> OTHER</p>
	<p>SPECIAL HVAC REQUIREMENTS</p> <p>1.</p> <p>2.</p> <p>3.</p>
	<p>CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:</p> <p>1.</p> <p>2.</p> <p>3.</p> <p>4.</p>
	<p>SECURITY REQUIRED:</p>

02.25.05





# GRAND ISLAND FIRE DEPARTMENT SITE AND NEEDS STUDY

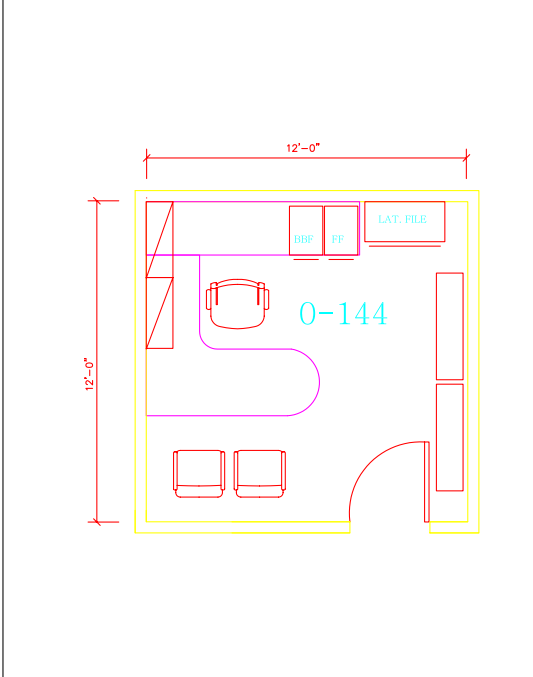
## Fire Station

### PROGRAMMING FORM

BKV GROUP

## SPACE STANDARDS

I/OFFICE/0-144



OFFICE/WORKSTATION: OFFICE  
 DEPARTMENT:  
 AREA REQUIRED: 144SQ.FT.

FURNITURE OPTIONS:  
☐ WORKSURFACE CORNER  
☐ WORKSURFACE L SHAPED  
☐ SHELVING ☐ FREE STANDING ☐ WALL MOUNTED  
☐ CLOSED SHELVING ☐ FREE STANDING ☐ WALL MOUNTED  
☐ TASKLIGHTS  
☐ TACKBOARDS  
☐ IN/OUT PAPER MGMT.  
☐ TOOLBARS ☐ KEYBOARD  
☐ ADDITIONAL SEATING(QTY.) ☐ BOX.BOX.FILE(QTY)  
☐ CONFERENCE TABLE ☐ FILE.FILE(QTY)  
☐ MARKER BOARD ☐ LATERAL FILE

FILING AND STORAGE NEEDS:  
 LINEAL FEET OF FILING: LINEAL FEET  
 LINEAL FEET OF STORAGE: LINEAL FEET

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:  
☐ PHONE ☐ MICRO FICHE'  
☐ COMPUTER ☐ CALCULATOR  
☐ LAZER-PRINTER ☐ TASK LIGHTS  
☐ COPY/COLLATE ☐ PROJECTION SCREEN  
☐ SLIDE/OVERHEAD ☐ DATA OUTLETS  
☐ SHEDDER ☐ OTHER

SPECIAL HVAC REQUIREMENTS  
 1.  
 2.  
 3.

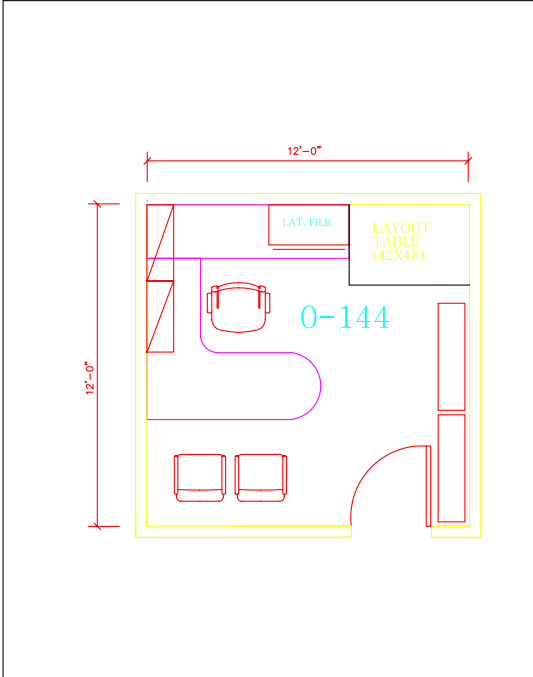
CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:  
 1. 3.  
 2. 4.

SECURITY REQUIRED: SECURITY REQUIRED

### PROGRAMMING FORM

BKV GROUP

I/OFFICE/0-144DT



OFFICE/WORKSTATION: OFFICE  
 DEPARTMENT:  
 AREA REQUIRED: 144SQ.FT.

FURNITURE OPTIONS:  
☐ WORKSURFACE CORNER  
☐ WORKSURFACE L SHAPED  
☐ SHELVING ☐ FREE STANDING ☐ WALL MOUNTED  
☐ CLOSED SHELVING ☐ FREE STANDING ☐ WALL MOUNTED  
☐ TASKLIGHTS  
☐ TACKBOARDS  
☐ IN/OUT PAPER MGMT.  
☐ TOOLBARS ☐ KEYBOARD  
☐ ADDITIONAL SEATING(QTY.) ☐ BOX.BOX.FILE(QTY)  
☐ CONFERENCE TABLE ☐ FILE.FILE(QTY)  
☐ MARKER BOARD ☐ LATERAL FILE

FILING AND STORAGE NEEDS:  
 LINEAL FEET OF FILING: LINEAL FEET  
 LINEAL FEET OF STORAGE: LINEAL FEET

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:  
☐ PHONE ☐ MICRO FICHE'  
☐ COMPUTER ☐ CALCULATOR  
☐ LAZER-PRINTER ☐ TASK LIGHTS  
☐ COPY/COLLATE ☐ PROJECTION SCREEN  
☐ SLIDE/OVERHEAD ☐ DATA OUTLETS  
☐ SHEDDER ☐ OTHER

SPECIAL HVAC REQUIREMENTS  
 1.  
 2.  
 3.

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:  
 1. 3.  
 2. 4.

SECURITY REQUIRED: SECURITY REQUIRED

02.25.05

## Fire Station

## PROGRAMMING FORM

BKV GROUP

I/OFFICE/0-144

SPACE  
STANDARDS

OFFICE/WORKSTATION: OFFICE  
DEPARTMENT:  
AREA REQUIRED: 168SQ.FT.

FURNITURE OPTIONS:  
☐ WORKSURFACE CORNER  
☐ WORKSURFACE L SHAPED  
☐ SHELVING ☐ FREE STANDING ☐ WALL MOUNTED  
☐ CLOSED SHELVING ☐ FREE STANDING ☐ WALL MOUNTED  
☐ TASKLIGHTS  
☐ TACKBOARDS  
☐ IN/OUT PAPER MGMT. ☐ KEYBOARD  
☐ TOOLBARS ☐ BOX.BOX.FILE(QTY)  
☐ ADDITIONAL SEATING(QTY.) ☐ FILE.FILE(QTY)  
☐ CONFERENCE TABLE ☐ LATERAL FILE  
☐ MARKER BOARD

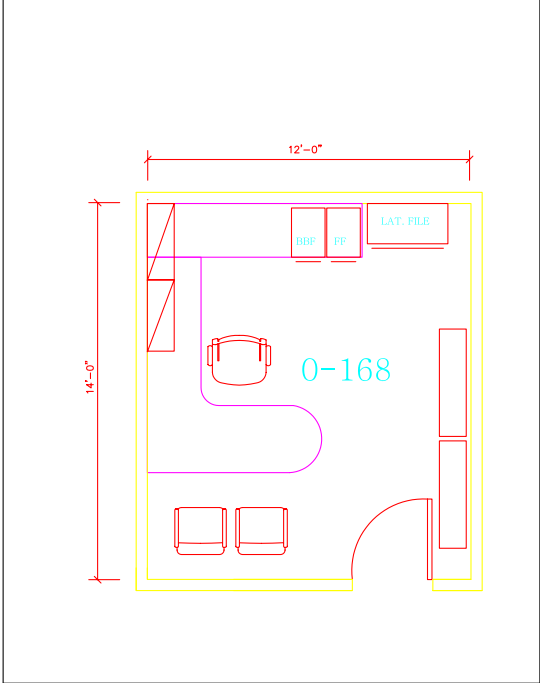
FILING AND STORAGE NEEDS:  
LINEAL FEET OF FILING: LINEAL FEET  
LINEAL FEET OF STORAGE: LINEAL FEET

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:  
☐ PHONE ☐ MICRO FICHE'  
☐ COMPUTER ☐ CALCULATOR  
☐ LAZER-PRINTER ☐ TASK LIGHTS  
☐ COPY/COLLATE ☐ PROJECTION SCREEN  
☐ SLIDE/OVERHEAD ☐ DATA OUTLETS  
☐ SHEDDER ☐ OTHER

SPECIAL HVAC REQUIREMENTS  
1.  
2.  
3.

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:  
1. 3.  
2. 4.

SECURITY REQUIRED: SECURITY REQUIRED



## PROGRAMMING FORM

BKV GROUP

I/OFFICE/0-144DT

OFFICE/WORKSTATION: OFFICE  
DEPARTMENT:  
AREA REQUIRED: 168SQ.FT.

FURNITURE OPTIONS:  
☐ WORKSURFACE CORNER  
☐ WORKSURFACE L SHAPED  
☐ SHELVING ☐ FREE STANDING ☐ WALL MOUNTED  
☐ CLOSED SHELVING ☐ FREE STANDING ☐ WALL MOUNTED  
☐ TASKLIGHTS  
☐ TACKBOARDS  
☐ IN/OUT PAPER MGMT. ☐ KEYBOARD  
☐ TOOLBARS ☐ BOX.BOX.FILE(QTY)  
☐ ADDITIONAL SEATING(QTY.) ☐ FILE.FILE(QTY)  
☐ CONFERENCE TABLE ☐ LATERAL FILE  
☐ MARKER BOARD

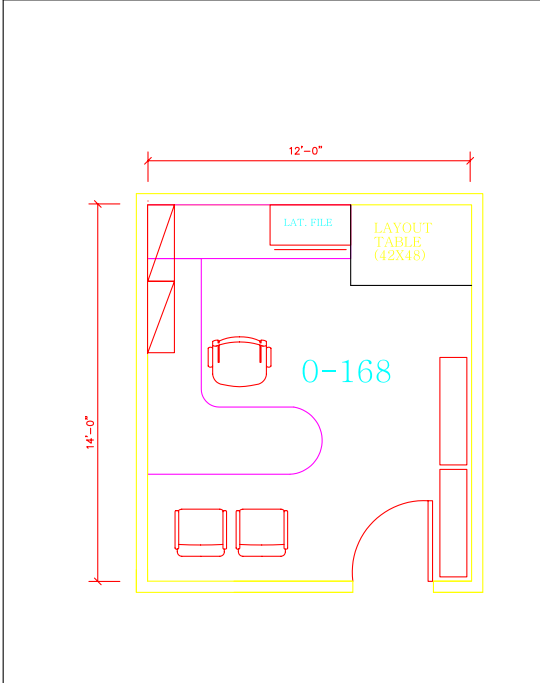
FILING AND STORAGE NEEDS:  
LINEAL FEET OF FILING: LINEAL FEET  
LINEAL FEET OF STORAGE: LINEAL FEET

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:  
☐ PHONE ☐ MICRO FICHE'  
☐ COMPUTER ☐ CALCULATOR  
☐ LAZER-PRINTER ☐ TASK LIGHTS  
☐ COPY/COLLATE ☐ PROJECTION SCREEN  
☐ SLIDE/OVERHEAD ☐ DATA OUTLETS  
☐ SHEDDER ☐ OTHER

SPECIAL HVAC REQUIREMENTS  
1.  
2.  
3.

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:  
1. 3.  
2. 4.

SECURITY REQUIRED: SECURITY REQUIRED



02.25.05

PROGRAMMING FORM

BKV GROUP

SPACE STANDARDS

16'-0"

12'-0"

0-192

OFFICE/WORKSTATION: OFFICE

DEPARTMENT:

AREA REQUIRED: 192SQ.FT.

FURNITURE OPTIONS:

☐ WORKSURFACE CORNER

☐ WORKSURFACE L SHAPED

☐ SHELVING

☐ CLOSED SHELVING

☐ TASKLIGHTS

☐ TACKBOARDS

☐ IN/OUT PAPER MGMT.

☐ TOOLBARS

☐ ADDITIONAL SEATING(QTY.)

☐ CONFERENCE TABLE

☐ MARKER BOARD

☐ FREE STANDING

☐ FREE STANDING

☐ KEYBOARD

☐ BOX.BOX.FILE(QTY)

☐ FILE.FILE(QTY)

☐ LATERAL FILE

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING:

LINEAL FEET OF STORAGE:

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

☐ PHONE

☐ COMPUTER

☐ LAZER-PRINTER

☐ COPY/COLLATE

☐ SLIDE/OVERHEAD

☐ SHEDDER

☐ MICRO FICHE

☐ CALCULATOR

☐ TASK LIGHTS

☐ PROJECTION SCREEN

☐ DATA OUTLETS

☐ OTHER

SPECIAL HVAC REQUIREMENTS

1.

2.

3.

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:

1.

2.

3.

4.

SECURITY REQUIRED:

PROGRAMMING FORM

BKV G

6'-6"

6'-0"

TO APP BAY

OFFICE/WORKSTATION: DELIVERY VESTIBULE

DEPARTMENT: DEPARTMENT

AREA REQUIRED: 80SQ.FT.

FURNITURE OPTIONS:

☒ WORKSURFACE CORNER

☒ WORKSURFACE L SHAPED

☒ SHELVING

☒ CLOSED SHELVING

☒ TASKLIGHTS

☒ TACKBOARDS

☒ IN/OUT PAPER MGMT.

☒ TOOLBARS

☒ ADDITIONAL SEATING(QTY.)

☒ CONFERENCE TABLE

☒ MARKER BOARD

☒ FREE STANDING

☒ FREE STANDING

☒ KEYBOARD

☒ BOX.BOX.FILE(QTY)

☒ FILE.FILE(QTY)

☒ LATERAL FILE

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING: LINEAL FEET

LINEAL FEET OF STORAGE: LINEAL FEET

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

☒ PHONE

☒ COMPUTER

☒ LAZER-PRINTER

☒ COPY/COLLATE

☒ SLIDE/OVERHEAD

☒ SHEDDER

☒ MICRO FICHE

☒ CALCULATOR

☒ TASK LIGHTS

☒ PROJECTION SCREEN

☒ DATA OUTLETS

☒ OTHER

SPECIAL HVAC REQUIREMENTS

1. HVAC

2. HVAC

3. HVAC

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:

1. LINE1

LINE2

2. LINE1

LINE2

3. LINE1

LINE2

4. LINE1

LINE2

SECURITY REQUIRED: SECURITY REQUIRED

02.25.05

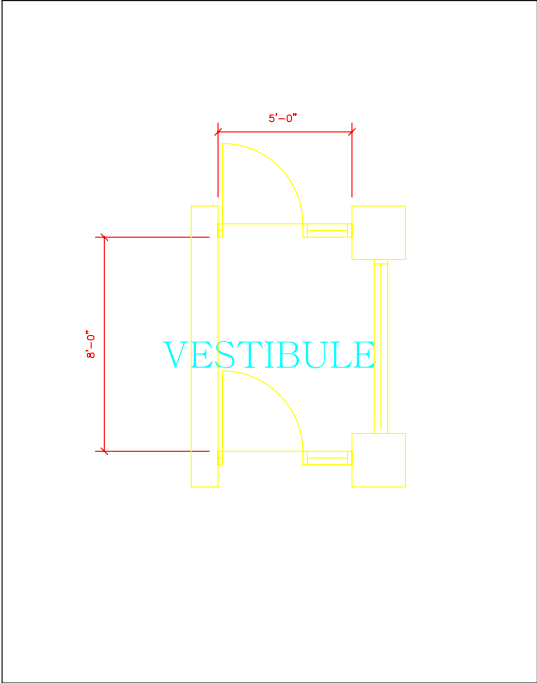
84

● ● ●

PROGRAMMING FORM

BKV GROUP

SPACE STANDARDS



OFFICE/WORKSTATION: STAFF ENTRY

DEPARTMENT: DEPARTMENT

AREA REQUIRED: 450SQ.FT.

FURNITURE OPTIONS:

<input checked="" type="checkbox"/> WORKSURFACE CORNER	
<input checked="" type="checkbox"/> WORKSURFACE L SHAPED	
<input checked="" type="checkbox"/> SHELVING	<input checked="" type="checkbox"/> FREE STANDING <input checked="" type="checkbox"/> WALL MOUNTED
<input checked="" type="checkbox"/> CLOSED SHELVING	<input checked="" type="checkbox"/> FREE STANDING <input checked="" type="checkbox"/> WALL MOUNTED
<input checked="" type="checkbox"/> TASKLIGHTS	
<input checked="" type="checkbox"/> TACKBOARDS	
<input checked="" type="checkbox"/> IN/OUT PAPER MGMT.	
<input checked="" type="checkbox"/> TOOLBARS	<input checked="" type="checkbox"/> KEYBOARD
<input checked="" type="checkbox"/> ADDITIONAL SEATING(QTY.)	<input checked="" type="checkbox"/> BOX.BOX.FILE(QTY)
<input checked="" type="checkbox"/> CONFERENCE TABLE	<input checked="" type="checkbox"/> FILE.FILE(QTY)
<input checked="" type="checkbox"/> MARKER BOARD	<input checked="" type="checkbox"/> LATERAL FILE

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING: LINEAL FEET

LINEAL FEET OF STORAGE: LINEAL FEET

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

<input checked="" type="checkbox"/> PHONE	<input checked="" type="checkbox"/> MICRO FICHE'
<input checked="" type="checkbox"/> COMPUTER	<input checked="" type="checkbox"/> CALCULATOR
<input checked="" type="checkbox"/> LAZER-PRINTER	<input checked="" type="checkbox"/> TASK LIGHTS
<input checked="" type="checkbox"/> COPY/COLLATE	<input checked="" type="checkbox"/> PROJECTION SCREEN
<input checked="" type="checkbox"/> SLIDE/OVERHEAD	<input checked="" type="checkbox"/> DATA OUTLETS
<input checked="" type="checkbox"/> SHEDDER	<input checked="" type="checkbox"/> OTHER

SPECIAL HVAC REQUIREMENTS

1. HVAC

2. HVAC

3. HVAC

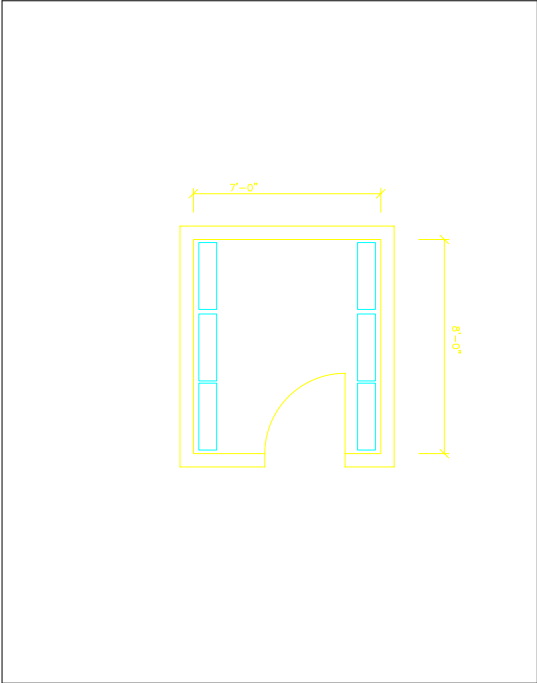
CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:

1. LINE1	3. LINE1
LINE2	LINE2
2. LINE1	4. LINE1
LINE2	LINE2

SECURITY REQUIRED: SECURITY REQUIRED

PROGRAMMING FORM

BKPV



OFFICE/WORKSTATION: DATA/TELEPHONE ROOM

DEPARTMENT:

AREA REQUIRED: 42.SQ.FT

FURNITURE OPTIONS:

<input type="checkbox"/> WORKSURFACE CORNER	
<input type="checkbox"/> WORKSURFACE L SHAPED	
<input type="checkbox"/> SHELVING	<input type="checkbox"/> FREE STANDING <input type="checkbox"/> WALL MOUNTED
<input type="checkbox"/> CLOSED SHELVING	<input type="checkbox"/> FREE STANDING <input type="checkbox"/> WALL MOUNTED
<input type="checkbox"/> TASKLIGHTS	
<input type="checkbox"/> TACKBOARDS	
<input type="checkbox"/> IN/OUT PAPER MGMT.	
<input type="checkbox"/> TOOLBARS	<input type="checkbox"/> KEYBOARD
<input type="checkbox"/> ADDITIONAL SEATING(QTY.)	<input type="checkbox"/> BOX.BOX.FILE(QTY)
<input type="checkbox"/> CONFERENCE TABLE	<input type="checkbox"/> FILE.FILE(QTY)
<input type="checkbox"/> MARKER BOARD	<input type="checkbox"/> LATERAL FILE

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING:

LINEAL FEET OF STORAGE:

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

<input type="checkbox"/> PHONE	<input type="checkbox"/> MICRO FICHE'
<input type="checkbox"/> COMPUTER	<input type="checkbox"/> CALCULATOR
<input type="checkbox"/> LAZER-PRINTER	<input type="checkbox"/> TASK LIGHTS
<input type="checkbox"/> COPY/COLLATE	<input type="checkbox"/> PROJECTION SCREEN
<input type="checkbox"/> SLIDE/OVERHEAD	<input type="checkbox"/> DATA OUTLETS
<input type="checkbox"/> SHEDDER	<input type="checkbox"/> OTHER

SPECIAL HVAC REQUIREMENTS

1.

2.

3.

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:

1.	3.
2.	4.

SECURITY REQUIRED:

PROGRAMMING FORM

BKPV

SPACE STANDARDS

I/OFFICE/R-48A

R-48A

OFFICE/WORKSTATION: JANITORS CLOSET

DEPARTMENT:

AREA REQUIRED: 48SQ.FT

FURNITURE OPTIONS:

☐ WORKSURFACE CORNER

☐ WORKSURFACE L SHAPED

☐ SHELVING

☐ CLOSED SHELVING

☐ TASKLIGHTS

☐ TACKBOARDS

☐ IN/OUT PAPER MGMT.

☐ TOOLBARS

☐ ADDITIONAL SEATING(QTY.)

☐ CONFERENCE TABLE

☐ MARKER BOARD

☐ FREE STANDING

☐ FREE STANDING

☐ WALL MOUNTED

☐ WALL MOUNTED

☐ KEYBOARD

☐ BOX.BOX.FILE(QTY)

☐ FILE.FILE(QTY)

☐ LATERAL FILE

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING:

LINEAL FEET OF STORAGE:

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

☐ PHONE

☐ COMPUTER

☐ LAZER-PRINTER

☐ COPY/COLLATE

☐ SLIDE/OVERHEAD

☐ SHEDDER

☐ MICRO FICHE'

☐ CALCULATOR

☐ TASK LIGHTS

☐ PROJECTION SCREEN

☐ DATA OUTLETS

☐ OTHER

SPECIAL HVAC REQUIREMENTS

1.

2.

3.

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:

1.

2.

3.

4.

SECURITY REQUIRED:

PROGRAMMING FORM

BKPV

I/OFFICE/R-58

R-58

OFFICE/WORKSTATION: BUNK ROOM

DEPARTMENT:

AREA REQUIRED: 58.SQ.FT

FURNITURE OPTIONS:

☐ WORKSURFACE CORNER

☐ WORKSURFACE L SHAPED

☐ SHELVING

☐ CLOSED SHELVING

☐ TASKLIGHTS

☐ TACKBOARDS

☐ IN/OUT PAPER MGMT.

☐ TOOLBARS

☐ ADDITIONAL SEATING(QTY.)

☐ CONFERENCE TABLE

☐ MARKER BOARD

☐ FREE STANDING

☐ FREE STANDING

☐ WALL MOUNTED

☐ WALL MOUNTED

☐ KEYBOARD

☐ BOX.BOX.FILE(QTY)

☐ FILE.FILE(QTY)

☐ LATERAL FILE

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING:

LINEAL FEET OF STORAGE:

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

☐ PHONE

☐ COMPUTER

☐ LAZER-PRINTER

☐ COPY/COLLATE

☐ SLIDE/OVERHEAD

☐ SHEDDER

☐ MICRO FICHE'

☐ CALCULATOR

☐ TASK LIGHTS

☐ PROJECTION SCREEN

☐ DATA OUTLETS

☐ OTHER

SPECIAL HVAC REQUIREMENTS

1.

2.

3.

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:

1.

2.

3.

4.

SECURITY REQUIRED:



PROGRAMMING FORM

BKPV

SPACE STANDARDS

I/OFFICE/R-80C

6'-6"

TO APP BAY

MOP SINK

12'-0"

OFFICE/WORKSTATION: EMS CLEAN-UP ROOM

DEPARTMENT:

AREA REQUIRED: 80.SQ.FT

FURNITURE OPTIONS:

☐ WORKSURFACE CORNER

☐ WORKSURFACE L SHAPED

☐ SHELVING

☐ CLOSED SHELVING

☐ TASKLIGHTS

☐ TACKBOARDS

☐ IN/OUT PAPER MGMT.

☐ TOOLBARS

☐ ADDITIONAL SEATING(QTY.)

☐ CONFERENCE TABLE

☐ MARKER BOARD

☐ FREE STANDING

☐ FREE STANDING

☐

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☐

☐

☐

☐

☐

☐ WALL MOUNTED

☐ WALL MOUNTED

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☐ KEYBOARD

☐ BOX.BOX.FILE(QTY)

☐ FILE.FILE(QTY)

☐ LATERAL FILE

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING:

LINEAL FEET OF STORAGE:

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

☐ PHONE

☐ COMPUTER

☐ LAZER-PRINTER

☐ COPY/COLLATE

☐ SLIDE/OVERHEAD

☐ SHEDDER

☐ MICRO FICHE'

☐ CALCULATOR

☐ TASK LIGHTS

☐ PROJECTION SCREEN

☐ DATA OUTLETS

☐ OTHER

SPECIAL HVAC REQUIREMENTS

1.

2.

3.

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:

1.

3.

2.

4.

SECURITY REQUIRED:

PROGRAMMING FORM

BKV GROUP

FILE

6'-6"

TO APP BAY

12'-0"

OFFICE/WORKSTATION: OFFICE/WORKSTATION

DEPARTMENT: DEPARTMENT

AREA REQUIRED: 80SQ.FT.

FURNITURE OPTIONS:

☒ WORKSURFACE CORNER

☒ WORKSURFACE L SHAPED

☒ SHELVING

☒ CLOSED SHELVING

☒ TASKLIGHTS

☒ TACKBOARDS

☒ IN/OUT PAPER MGMT.

☒ TOOLBARS

☒ ADDITIONAL SEATING(QTY.)

☒ CONFERENCE TABLE

☒ MARKER BOARD

☒ FREE STANDING

☒ FREE STANDING

☒

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☒ WALL MOUNTED

☒ WALL MOUNTED

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☒ KEYBOARD

☒ BOX.BOX.FILE(QTY)

☒ FILE.FILE(QTY)

☒ LATERAL FILE

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING: LINEAL FEET

LINEAL FEET OF STORAGE: LINEAL FEET

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

☒ PHONE

☒ COMPUTER

☒ LAZER-PRINTER

☒ COPY/COLLATE

☒ SLIDE/OVERHEAD

☒ SHEDDER

☒ MICRO FICHE'

☒ CALCULATOR

☒ TASK LIGHTS

☒ PROJECTION SCREEN

☒ DATA OUTLETS

☒ OTHER

SPECIAL HVAC REQUIREMENTS

1. HVAC

2. HVAC

3. HVAC

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:

1. LINE1

LINE2

3. LINE1

LINE2

2. LINE1

LINE2

4. LINE1

LINE2

SECURITY REQUIRED: SECURITY REQUIRED





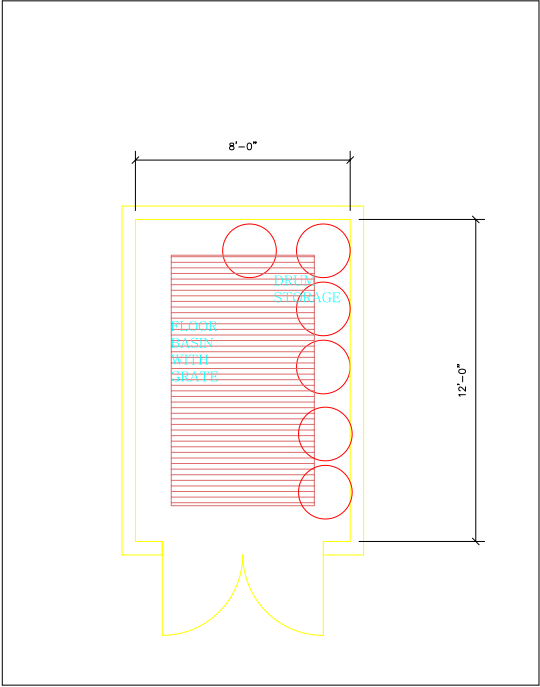
Fire Station

PROGRAMMING FORM

BKPV

SPACE STANDARDS

I/OFFICE/R-80F



OFFICE/WORKSTATION: LIQUID STORAGE

DEPARTMENT:

AREA REQUIRED: 80.SQ.FT

FURNITURE OPTIONS:

☐ WORKSURFACE CORNER

☐ WORKSURFACE L SHAPED

☐ SHELVING

☐ CLOSED SHELVING

☐ TASKLIGHTS

☐ TACKBOARDS

☐ IN/OUT PAPER MGMT.

☐ TOOLBARS

☐ ADDITIONAL SEATING(QTY.)

☐ CONFERENCE TABLE

☐ MARKER BOARD

☐ FREE STANDING

☐ FREE STANDING

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☐ WALL MOUNTED

☐ WALL MOUNTED

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☐ KEYBOARD

☐ BOX.BOX.FILE(QTY)

☐ FILE.FILE(QTY)

☐ LATERAL FILE

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING:

LINEAL FEET OF STORAGE:

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

☐ PHONE

☐ COMPUTER

☐ LAZER-PRINTER

☐ COPY/COLLATE

☐ SLIDE/OVERHEAD

☐ SHEDDER

☐ MICRO FICHE'

☐ CALCULATOR

☐ TASK LIGHTS

☐ PROJECTION SCREEN

☐ DATA OUTLETS

☐ OTHER

1.

2.

3.

1.

2.

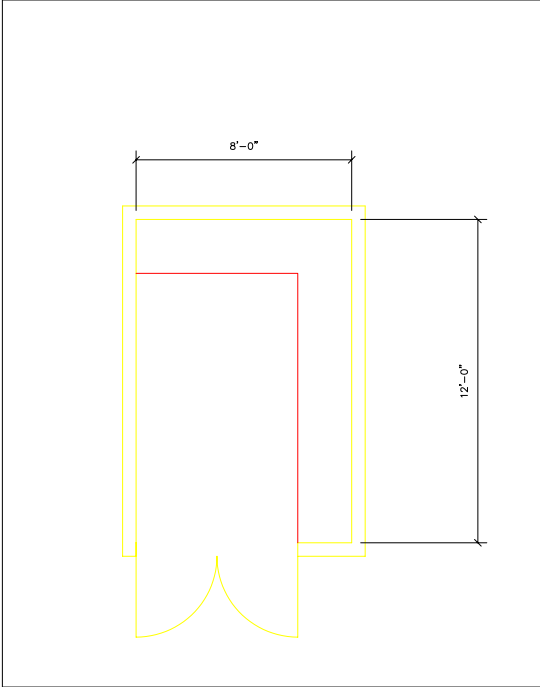
3.

4.

PROGRAMMING FORM

BKPV

I/OFFICE/R-80G



OFFICE/WORKSTATION: ARSON EVIDENCE STORAGE

DEPARTMENT:

AREA REQUIRED: 80.SQ.FT

FURNITURE OPTIONS:

☐ WORKSURFACE CORNER

☐ WORKSURFACE L SHAPED

☐ SHELVING

☐ CLOSED SHELVING

☐ TASKLIGHTS

☐ TACKBOARDS

☐ IN/OUT PAPER MGMT.

☐ TOOLBARS

☐ ADDITIONAL SEATING(QTY.)

☐ CONFERENCE TABLE

☐ MARKER BOARD

☐ FREE STANDING

☐ FREE STANDING

☐

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☐

☐

☐

☐

☐

☐ WALL MOUNTED

☐ WALL MOUNTED

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☐ KEYBOARD

☐ BOX.BOX.FILE(QTY)

☐ FILE.FILE(QTY)

☐ LATERAL FILE

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING:

LINEAL FEET OF STORAGE:

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

☐ PHONE

☐ COMPUTER

☐ LAZER-PRINTER

☐ COPY/COLLATE

☐ SLIDE/OVERHEAD

☐ SHEDDER

☐ MICRO FICHE'

☐ CALCULATOR

☐ TASK LIGHTS

☐ PROJECTION SCREEN

☐ DATA OUTLETS

☐ OTHER

1.

2.

3.

1.

2.

3.

4.

02.25.05



PROGRAMMING FORM

BKV GROUP

SPACE STANDARDS

12'-0"

8'-0"

COPY MACHINE

FAX MACHINE

OFFICE/WORKSTATION: WORK/COPY

DEPARTMENT: DEPARTMENT

AREA REQUIRED: 96SQ.FT.

FURNITURE OPTIONS:

☒ WORKSURFACE CORNER

☒ WORKSURFACE L SHAPED

☒ SHELVING

☒ CLOSED SHELVING

☒ TASKLIGHTS

☒ TACKBOARDS

☒ IN/OUT PAPER MGMT.

☒ TOOLBARS

☒ ADDITIONAL SEATING(QTY.)

☒ CONFERENCE TABLE

☒ MARKER BOARD

☒ FREE STANDING

☒ WALL MOUNTED

☒ FREE STANDING

☒ WALL MOUNTED

☒ KEYBOARD

☒ BOX.BOX.FILE(QTY)

☒ FILE.FILE(QTY)

☒ LATERAL FILE

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING: LINEAL.FEET

LINEAL FEET OF STORAGE: LINEAL.FEET

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

☒ PHONE

☒ MICRO FICHE'

☒ COMPUTER

☒ CALCULATOR

☒ LAZER-PRINTER

☒ TASK LIGHTS

☒ COPY/COLLATE

☒ PROJECTION SCREEN

☒ SLIDE/OVERHEAD

☒ DATA OUTLETS

☒ SHEDDER

☒ OTHER

SPECIAL HVAC REQUIREMENTS

1. HVAC

2. HVAC

3. HVAC

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:

1. LINE1

2. LINE1

3. LINE1

4. LINE1

LINE2

LINE2

LINE2

LINE2

SECURITY REQUIRED: SECURITY.REQUIRED

PROGRAMMING FORM

BKPV

12'-0"

8'-6"

METAL SHELVES

PARTS CAB.

PARTS CAB.

METAL SHELVES

TOOLS

TOOLS

WORKBENCH

GRINDER

OFFICE/WORKSTATION: MAINT / WORKSHOP

DEPARTMENT:

AREA REQUIRED: 102.SQ.FT

FURNITURE OPTIONS:

☐ WORKSURFACE CORNER

☐ WORKSURFACE L SHAPED

☐ SHELVING

☐ CLOSED SHELVING

☐ TASKLIGHTS

☐ TACKBOARDS

☐ IN/OUT PAPER MGMT.

☐ TOOLBARS

☐ ADDITIONAL SEATING(QTY.)

☐ CONFERENCE TABLE

☐ MARKER BOARD

☐ FREE STANDING

☐ WALL MOUNTED

☐ FREE STANDING

☐ WALL MOUNTED

☐ KEYBOARD

☐ BOX.BOX.FILE(QTY)

☐ FILE.FILE(QTY)

☐ LATERAL FILE

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING:

LINEAL FEET OF STORAGE:

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

☐ PHONE

☐ MICRO FICHE'

☐ COMPUTER

☐ CALCULATOR

☐ LAZER-PRINTER

☐ TASK LIGHTS

☐ COPY/COLLATE

☐ PROJECTION SCREEN

☐ SLIDE/OVERHEAD

☐ DATA OUTLETS

☐ SHEDDER

☐ OTHER

SPECIAL HVAC REQUIREMENTS

1.

2.

3.

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:

1.

2.

3.

4.

SECURITY REQUIRED:

SPACE  
STANDARDS

PROGRAMMING FORM

BKV GROUP

FILE

8'-6"

TO APP BAY

medication

14'-0"

OFFICE/WORKSTATION: EMS STORAGE

DEPARTMENT: DEPARTMENT

AREA REQUIRED: 119SQ.FT.

FURNITURE OPTIONS:

☒ WORKSURFACE CORNER

☒ WORKSURFACE L SHAPED

☒ SHELVING

☒ CLOSED SHELVING

☒ TASKLIGHTS

☒ TASKBOARDS

☒ IN/OUT PAPER MGMT.

☒ TOOLBARS

☒ ADDITIONAL SEATING(QTY.)

☒ CONFERENCE TABLE

☒ MARKER BOARD

☐ FREE STANDING

☐ FREE STANDING

☐ KEYBOARD

☐ BOX,BOX,FILE(QTY)

☐ FILE,FILE(QTY)

☐ LATERAL FILE

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING: LINEAL FEET

LINEAL FEET OF STORAGE: LINEAL FEET

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

☒ PHONE

☒ COMPUTER

☒ LAZER-PRINTER

☒ COPY/COLLATE

☒ SLIDE/OVERHEAD

☒ SHEDDER

☒ MICRO FICHE'

☒ CALCULATOR

☒ TASK LIGHTS

☒ PROJECTION SCREEN

☒ DATA OUTLETS

☒ OTHER

SPECIAL HVAC REQUIREMENTS

1. HVAC

2. HVAC

3. HVAC

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:

1. LINE1

LINE2

3. LINE1

LINE2

4. LINE1

LINE2

SECURITY REQUIRED: SECURITY REQUIRED

PROGRAMMING FORM

BKPV

I/OFFICE/R-120C

10'-0"

TO ADMIN

PASS-THRU COUNTER TO ADMIN

PUBLIC WAITING

OFFICE/WORKSTATION: PUBLIC STATION ENTRY

DEPARTMENT:

AREA REQUIRED: 120 SQ.FT.

FURNITURE OPTIONS:

☐ WORKSURFACE CORNER

☐ WORKSURFACE L SHAPED

☐ SHELVING

☐ CLOSED SHELVING

☐ TASKLIGHTS

☐ TASKBOARDS

☐ IN/OUT PAPER MGMT.

☐ TOOLBARS

☐ ADDITIONAL SEATING(QTY.)

☐ CONFERENCE TABLE

☐ MARKER BOARD

☐ FREE STANDING

☐ FREE STANDING

☐ KEYBOARD

☐ BOX,BOX,FILE(QTY)

☐ FILE,FILE(QTY)

☐ LATERAL FILE

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING:

LINEAL FEET OF STORAGE:

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

☐ PHONE

☐ COMPUTER

☐ LAZER-PRINTER

☐ COPY/COLLATE

☐ SLIDE/OVERHEAD

☐ SHEDDER

☐ MICRO FICHE'

☐ CALCULATOR

☐ TASK LIGHTS

☐ PROJECTION SCREEN

☐ DATA OUTLETS

☐ OTHER

SPECIAL HVAC REQUIREMENTS

1.

2.

3.

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:

1.

3.

2.

4.

SECURITY REQUIRED:

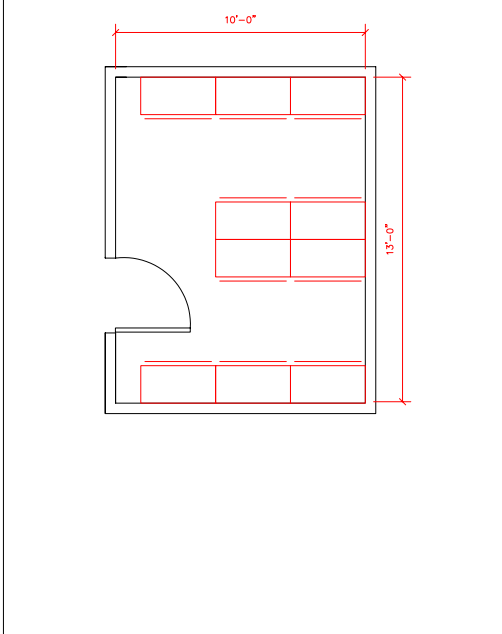


SPACE  
STANDARDS

PROGRAMMING FORM

BKV GROUP

FILE



OFFICE/WORKSTATION: FILE ROOM

DEPARTMENT: DEPARTMENT

AREA REQUIRED: 130SQ.FT.

FURNITURE OPTIONS:

<input checked="" type="checkbox"/> WORKSURFACE CORNER	<input checked="" type="checkbox"/> FREE STANDING	<input checked="" type="checkbox"/> WALL MOUNTED
<input checked="" type="checkbox"/> WORKSURFACE L SHAPED	<input checked="" type="checkbox"/> FREE STANDING	<input checked="" type="checkbox"/> WALL MOUNTED
<input checked="" type="checkbox"/> SHELVING	<input checked="" type="checkbox"/> FREE STANDING	<input checked="" type="checkbox"/> WALL MOUNTED
<input checked="" type="checkbox"/> CLOSED SHELVING	<input checked="" type="checkbox"/> FREE STANDING	<input checked="" type="checkbox"/> WALL MOUNTED
<input checked="" type="checkbox"/> TASKLIGHTS		
<input checked="" type="checkbox"/> TACKBOARDS		
<input checked="" type="checkbox"/> IN/OUT PAPER MGMT.		
<input checked="" type="checkbox"/> TOOLBARS	<input checked="" type="checkbox"/> KEYBOARD	
<input checked="" type="checkbox"/> ADDITIONAL SEATING(QTY.)	<input checked="" type="checkbox"/> BOX.BOX.FILE(QTY)	
<input checked="" type="checkbox"/> CONFERENCE TABLE	<input checked="" type="checkbox"/> FILE.FILE(QTY)	
<input checked="" type="checkbox"/> MARKER BOARD	<input checked="" type="checkbox"/> LATERAL FILE	

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING: LINEAL FEET

LINEAL FEET OF STORAGE: LINEAL FEET

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

<input checked="" type="checkbox"/> PHONE	<input checked="" type="checkbox"/> MICRO FICHE'
<input checked="" type="checkbox"/> COMPUTER	<input checked="" type="checkbox"/> CALCULATOR
<input checked="" type="checkbox"/> LAZER-PRINTER	<input checked="" type="checkbox"/> TASK LIGHTS
<input checked="" type="checkbox"/> COPY/COLLATE	<input checked="" type="checkbox"/> PROJECTION SCREEN
<input checked="" type="checkbox"/> SLIDE/OVERHEAD	<input checked="" type="checkbox"/> DATA OUTLETS
<input checked="" type="checkbox"/> SHEDDER	<input checked="" type="checkbox"/> OTHER

SPECIAL HVAC REQUIREMENTS

1. HVAC
2. HVAC
3. HVAC

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:

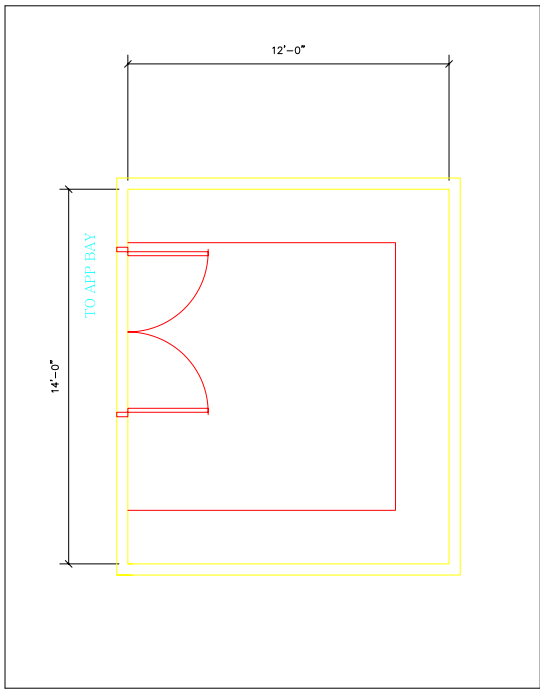
1. LINE1	3. LINE1
LINE2	LINE2
2. LINE1	4. LINE1
LINE2	LINE2

SECURITY REQUIRED: SECURITY REQUIRED

PROGRAMMING FORM

BKPV

I/OFFICE/R-144



OFFICE/WORKSTATION: GENERAL STORAGE

DEPARTMENT:

AREA REQUIRED: 144.SQ.FT

FURNITURE OPTIONS:

<input type="checkbox"/> WORKSURFACE CORNER	<input type="checkbox"/> FREE STANDING	<input type="checkbox"/> WALL MOUNTED
<input type="checkbox"/> WORKSURFACE L SHAPED	<input type="checkbox"/> FREE STANDING	<input type="checkbox"/> WALL MOUNTED
<input type="checkbox"/> SHELVING	<input type="checkbox"/> FREE STANDING	<input type="checkbox"/> WALL MOUNTED
<input type="checkbox"/> CLOSED SHELVING	<input type="checkbox"/> FREE STANDING	<input type="checkbox"/> WALL MOUNTED
<input type="checkbox"/> TASKLIGHTS		
<input type="checkbox"/> TACKBOARDS		
<input type="checkbox"/> IN/OUT PAPER MGMT.		
<input type="checkbox"/> TOOLBARS	<input type="checkbox"/> KEYBOARD	
<input type="checkbox"/> ADDITIONAL SEATING(QTY.)	<input type="checkbox"/> BOX.BOX.FILE(QTY)	
<input type="checkbox"/> CONFERENCE TABLE	<input type="checkbox"/> FILE.FILE(QTY)	
<input type="checkbox"/> MARKER BOARD	<input type="checkbox"/> LATERAL FILE	

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING:

LINEAL FEET OF STORAGE:

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

<input type="checkbox"/> PHONE	<input type="checkbox"/> MICRO FICHE'
<input type="checkbox"/> COMPUTER	<input type="checkbox"/> CALCULATOR
<input type="checkbox"/> LAZER-PRINTER	<input type="checkbox"/> TASK LIGHTS
<input type="checkbox"/> COPY/COLLATE	<input type="checkbox"/> PROJECTION SCREEN
<input type="checkbox"/> SLIDE/OVERHEAD	<input type="checkbox"/> DATA OUTLETS
<input type="checkbox"/> SHEDDER	<input type="checkbox"/> OTHER

SPECIAL HVAC REQUIREMENTS

- 1.
- 2.
- 3.

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:

1.	3.
2.	4.

SECURITY REQUIRED:

SPACE STANDARDS

PROGRAMMING FORM

BKV GROUP

FILE

6'-0"

COPIER

(50) MAIL SLOTS - 4"X10"X1" STACKED TWO HIGH

WALL CABINETS

BASH CABINETS

A-120A

20'-0"

PRINTER

FAK

OFFICE/WORKSTATION: OFFICE/WORKSTATION

DEPARTMENT: DEPARTMENT

AREA REQUIRED: SQ.FT.

FURNITURE OPTIONS:

☒ WORKSURFACE CORNER

☒ WORKSURFACE L SHAPED

☒ SHELVING

☒ CLOSED SHELVING

☒ TASKLIGHTS

☒ TACKBOARDS

☒ IN/OUT PAPER MGMT.

☒ TOOLBARS

☒ ADDITIONAL SEATING(QTY.)

☒ CONFERENCE TABLE

☒ MARKER BOARD

☒ FREE STANDING

☒ FREE STANDING

☒ KEYBOARD

☒ BOX,BOX,FILE(QTY)

☒ FILE,FILE(QTY)

☒ LATERAL FILE

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING: LINEAL FEET

LINEAL FEET OF STORAGE: LINEAL FEET

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

☒ PHONE

☒ COMPUTER

☒ LAZER-PRINTER

☒ COPY/COLLATE

☒ SLIDE/OVERHEAD

☒ SHEDDER

☒ MICRO FICHE

☒ CALCULATOR

☒ TASK LIGHTS

☒ PROJECTION SCREEN

☒ DATA OUTLETS

☒ OTHER

SPECIAL HVAC REQUIREMENTS

1. HVAC

2. HVAC

3. HVAC

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:

1. LINE1

LINE2

2. LINE1

LINE2

3. LINE1

LINE2

4. LINE1

LINE2

SECURITY REQUIRED: SECURITY REQUIRED

PROGRAMMING FORM

BKV GROUP

FILE

9'-0"

MEN

19'-0"

WOMEN

OFFICE/WORKSTATION: PUBLIC TOILETS

DEPARTMENT: DEPARTMENT

AREA REQUIRED: 171SQ.FT.

FURNITURE OPTIONS:

☒ WORKSURFACE CORNER

☒ WORKSURFACE L SHAPED

☒ SHELVING

☒ CLOSED SHELVING

☒ TASKLIGHTS

☒ TACKBOARDS

☒ IN/OUT PAPER MGMT.

☒ TOOLBARS

☒ ADDITIONAL SEATING(QTY.)

☒ CONFERENCE TABLE

☒ MARKER BOARD

☒ FREE STANDING

☒ FREE STANDING

☒ KEYBOARD

☒ BOX,BOX,FILE(QTY)

☒ FILE,FILE(QTY)

☒ LATERAL FILE

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING: LINEAL FEET

LINEAL FEET OF STORAGE: LINEAL FEET

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

☒ PHONE

☒ COMPUTER

☒ LAZER-PRINTER

☒ COPY/COLLATE

☒ SLIDE/OVERHEAD

☒ SHEDDER

☒ MICRO FICHE

☒ CALCULATOR

☒ TASK LIGHTS

☒ PROJECTION SCREEN

☒ DATA OUTLETS

☒ OTHER

SPECIAL HVAC REQUIREMENTS

1. HVAC

2. HVAC

3. HVAC

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:

1. LINE1

LINE2

2. LINE1

LINE2

3. LINE1

LINE2

4. LINE1

LINE2

SECURITY REQUIRED: SECURITY REQUIRED

02.25.05



## BKV GROUP

	OFFICE/WORKSTATION: <u>OFFICE/WORKSTATION</u> DEPARTMENT: <u>DEPARTMENT</u> AREA REQUIRED: <u>SQ.FT.</u>
	FURNITURE OPTIONS: <input checked="" type="checkbox"/> WORKSURFACE CORNER <input checked="" type="checkbox"/> WORKSURFACE L SHAPED <input checked="" type="checkbox"/> SHELVEING <input checked="" type="checkbox"/> FREE STANDING <input checked="" type="checkbox"/> WALL MOUNTED <input checked="" type="checkbox"/> CLOSED SHELVEING <input checked="" type="checkbox"/> FREE STANDING <input checked="" type="checkbox"/> WALL MOUNTED <input checked="" type="checkbox"/> TASKLIGHTS <input checked="" type="checkbox"/> TACKBOARDS <input checked="" type="checkbox"/> IN/OUT PAPER MGMT. <input checked="" type="checkbox"/> TOOLBARS <input checked="" type="checkbox"/> ADDITIONAL SEATING(QTY.) <input checked="" type="checkbox"/> CONFERENCE TABLE <input checked="" type="checkbox"/> MARKER BOARD
	<input checked="" type="checkbox"/> KEYBOARD <input checked="" type="checkbox"/> BOX.BOX.FILE(QTY) <input checked="" type="checkbox"/> FILE.FILE(QTY) <input checked="" type="checkbox"/> LATERAL FILE
	FILING AND STORAGE NEEDS: LINEAL FEET OF FILING: <u>LINEAL.FEET</u> LINEAL FEET OF STORAGE: <u>LINEAL.FEET</u>
	SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT: <input checked="" type="checkbox"/> PHONE <input checked="" type="checkbox"/> MICRO FICHE' <input checked="" type="checkbox"/> COMPUTER <input checked="" type="checkbox"/> CALCULATOR <input checked="" type="checkbox"/> LAZER-PRINTER <input checked="" type="checkbox"/> TASK LIGHTS <input checked="" type="checkbox"/> COPY/COLLATE <input checked="" type="checkbox"/> PROJECTION SCREEN <input checked="" type="checkbox"/> SLIDE/OVERHEAD <input checked="" type="checkbox"/> DATA OUTLETS <input checked="" type="checkbox"/> SHEDDER <input checked="" type="checkbox"/> OTHER
	SPECIAL HVAC REQUIREMENTS 1. HVAC 2. HVAC 3. HVAC
	CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH: 1. LINE1 LINE2 2. LINE1 LINE2 3. LINE1 LINE2 4. LINE1 LINE2
	SECURITY REQUIRED: <u>SECURITY.REQUIRED</u>

## BKV GROUPE

	FILE
	OFFICE/WORKSTATION: <u>BREAK ROOM</u>
	DEPARTMENT: <u>DEPARTMENT</u>
	AREA REQUIRED: <u>195SQ.FT.</u>
	FURNITURE OPTIONS:
	<input checked="" type="checkbox"/> WORKSURFACE CORNER
	<input checked="" type="checkbox"/> WORKSURFACE L SHAPED
	<input checked="" type="checkbox"/> SHELVING
	<input checked="" type="checkbox"/> CLOSED SHELVING
	<input checked="" type="checkbox"/> TASKLIGHTS
<input checked="" type="checkbox"/> TACKBOARDS	
<input checked="" type="checkbox"/> IN/OUT PAPER MGMT.	
<input checked="" type="checkbox"/> TOOLBARS	
<input checked="" type="checkbox"/> ADDITIONAL SEATING(QTY.)	
<input checked="" type="checkbox"/> CONFERENCE TABLE	
<input checked="" type="checkbox"/> MARKER BOARD	
FILING AND STORAGE NEEDS:	
LINEAL FEET OF FILING: <u>LINEAL FEET</u>	
LINEAL FEET OF STORAGE: <u>LINEAL FEET</u>	
SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:	
<input checked="" type="checkbox"/> PHONE	
<input checked="" type="checkbox"/> COMPUTER	
<input checked="" type="checkbox"/> LAZER-PRINTER	
<input checked="" type="checkbox"/> COPY/COLLATE	
<input checked="" type="checkbox"/> SLIDE/OVERHEAD	
<input checked="" type="checkbox"/> SHEDDER	
<input checked="" type="checkbox"/> MICRO FICHE	
<input checked="" type="checkbox"/> CALCULATOR	
<input checked="" type="checkbox"/> TASK LIGHTS	
<input checked="" type="checkbox"/> PROJECTION SCREEN	
<input checked="" type="checkbox"/> DATA OUTLETS	
<input checked="" type="checkbox"/> OTHER	
SPECIAL HVAC REQUIREMENTS	
1. HVAC	
2. HVAC	
3. HVAC	
CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:	
1. LINE1	
LINE2	
2. LINE1	
LINE2	
3. LINE1	
LINE2	
4. LINE1	
LINE2	
SECURITY REQUIRED: <u>SECURITY REQUIRED</u>	

02.25.05





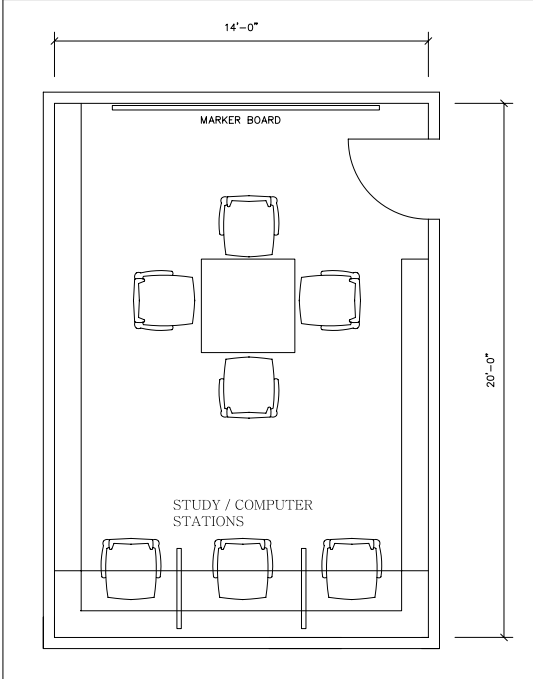
## Fire Station

## PROGRAMMING FORM

BKPV

SPACE  
STANDARDS

I/CONFERENCE/C-280



SPACE OR ROOM TYPE: LIBRARY

DEPARTMENT:

AREA REQUIRED: 280.SQ.FT

FURNITURE OPTIONS:

- ☐ SHELVE
- ☐ CONFERENCE-TABLE
- ☐ ADDITIONAL-SEATING(QTY)
- ☐ AV.CART
- ☐ OTHER

MILLWORK OPTIONS:

- ☐ UPPER CABINETS/SHELVE
- OPEN/CLOSED:
- ☐ LOWER CABINETS
- OPEN/CLOSED:

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING:

LINEAL FEET OF STORAGE:

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

<input type="checkbox"/> PHONE	<input type="checkbox"/> SHREDDER
<input type="checkbox"/> COMPUTER	<input type="checkbox"/> PROJECTION SCREEN
<input type="checkbox"/> LAZER-PRINTER	<input type="checkbox"/> MICROWAVE
<input type="checkbox"/> COPY/COLLATE	<input type="checkbox"/> STOVE
<input type="checkbox"/> SLIDE/OVERHEAD	<input type="checkbox"/> RANGE
<input type="checkbox"/> MICRO FICHE	<input type="checkbox"/> COMPACTOR
<input type="checkbox"/> TASK LIGHTS	<input type="checkbox"/> REFRIGERATOR
<input type="checkbox"/> ERASER BOARD	<input type="checkbox"/> OTHER

SPECIAL HVAC REQUIREMENTS

<input type="checkbox"/> SINK	<input type="checkbox"/> DISPOSAL
<input type="checkbox"/> DISHWASHER	<input type="checkbox"/> OTHER

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:

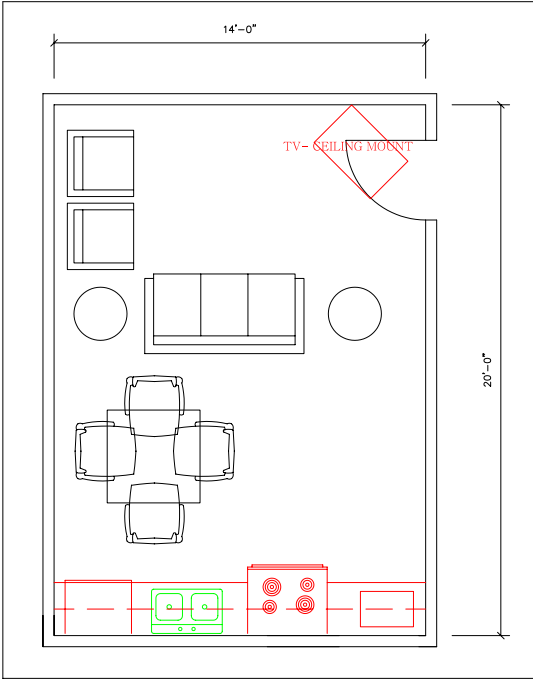
1.	3.
2.	4.

SECURITY REQUIRED:

## PROGRAMMING FORM

BKPV

I/CONFERENCE/C-280



SPACE OR ROOM TYPE: DAYROOM / KITCHEN

DEPARTMENT:

AREA REQUIRED: 280.SQ.FT

FURNITURE OPTIONS:

- ☐ SHELVE
- ☐ CONFERENCE-TABLE
- ☐ ADDITIONAL-SEATING(QTY)
- ☐ AV.CART
- ☐ OTHER

MILLWORK OPTIONS:

- ☐ UPPER CABINETS/SHELVE
- OPEN/CLOSED:
- ☐ LOWER CABINETS
- OPEN/CLOSED:

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING:

LINEAL FEET OF STORAGE:

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

<input type="checkbox"/> PHONE	<input type="checkbox"/> SHREDDER
<input type="checkbox"/> COMPUTER	<input type="checkbox"/> PROJECTION SCREEN
<input type="checkbox"/> LAZER-PRINTER	<input type="checkbox"/> MICROWAVE
<input type="checkbox"/> COPY/COLLATE	<input type="checkbox"/> STOVE
<input type="checkbox"/> SLIDE/OVERHEAD	<input type="checkbox"/> RANGE
<input type="checkbox"/> MICRO FICHE	<input type="checkbox"/> COMPACTOR
<input type="checkbox"/> TASK LIGHTS	<input type="checkbox"/> REFRIGERATOR
<input type="checkbox"/> ERASER BOARD	<input type="checkbox"/> OTHER

SPECIAL HVAC REQUIREMENTS

<input type="checkbox"/> SINK	<input type="checkbox"/> DISPOSAL
<input type="checkbox"/> DISHWASHER	<input type="checkbox"/> OTHER

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:

1.	3.
2.	4.

SECURITY REQUIRED:

02.25.05

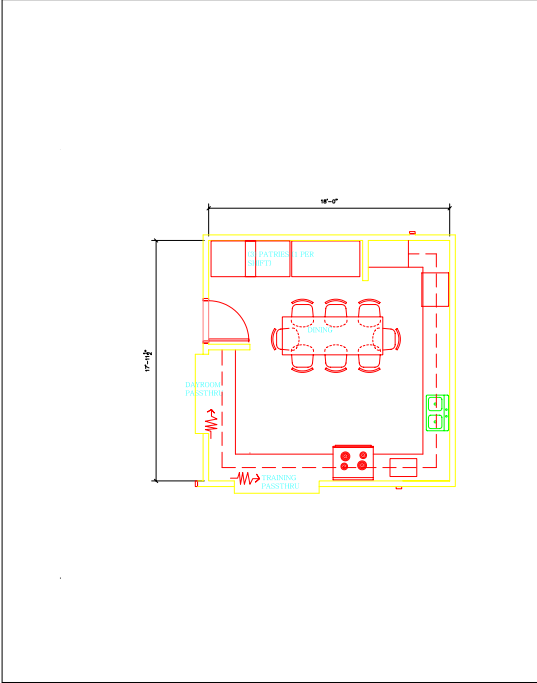
Fire Station

PROGRAMMING FORM

BKPV

SPACE STANDARDS

I/OFFICE/R-323



OFFICE/WORKSTATION: KITCHEN

DEPARTMENT:

AREA REQUIRED: 323.SQ.FT

FURNITURE OPTIONS:

☐ WORKSURFACE CORNER

☐ WORKSURFACE L SHAPED

☐ SHELVING

☐ CLOSED SHELVING

☐ TASKLIGHTS

☐ TACKBOARDS

☐ IN/OUT PAPER MGMT.

☐ TOOLBARS

☐ ADDITIONAL SEATING(QTY.)

☐ CONFERENCE TABLE

☐ MARKER BOARD

☐ FREE STANDING

☐ FREE STANDING

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☐ WALL MOUNTED

☐ WALL MOUNTED

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☐ KEYBOARD

☐ BOX.BOX.FILE(QTY)

☐ FILE.FILE(QTY)

☐ LATERAL FILE

☐ PHONE

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☐ MICRO FICHE'

☐ CALCULATOR

☐ TASK LIGHTS

☐ PROJECTION SCREEN

☐ DATA OUTLETS

☐

1.

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1.

2.

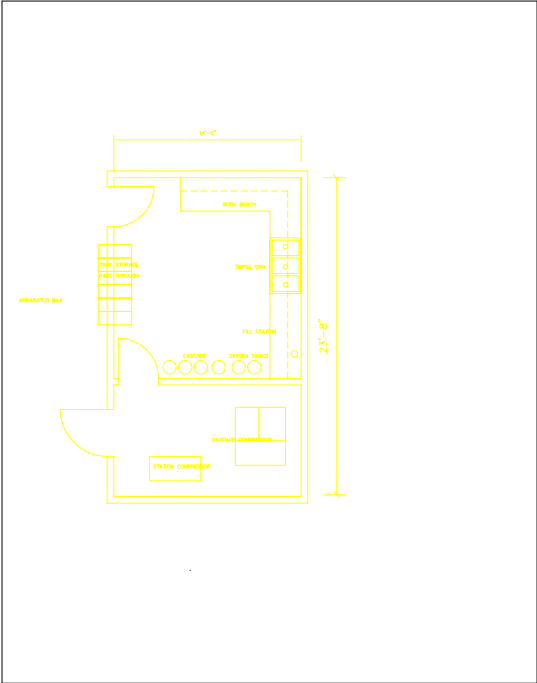
3.

4.

PROGRAMMING FORM

BKV GROUP

I/OFFICE/R-334



OFFICE/WORKSTATION: SCBA ROOM

DEPARTMENT:

AREA REQUIRED: 334SQ.FT

FURNITURE OPTIONS:

☐ WORKSURFACE CORNER

☐ WORKSURFACE L SHAPED

☐ SHELVING

☐ CLOSED SHELVING

☐ TASKLIGHTS

☐ TACKBOARDS

☐ IN/OUT PAPER MGMT.

☐ TOOLBARS

☐ ADDITIONAL SEATING(QTY.)

☐ CONFERENCE TABLE

☐ MARKER BOARD

☐ FREE STANDING

☐ FREE STANDING

☐

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☐ WALL MOUNTED

☐ WALL MOUNTED

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☐ KEYBOARD

☐ BOX.BOX.FILE(QTY)

☐ FILE.FILE(QTY)

☐ LATERAL FILE

☐ PHONE

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☐ MICRO FICHE'

☐ CALCULATOR

☐ TASK LIGHTS

☐ PROJECTION SCREEN

☐ DATA OUTLETS

☐

1.

2.

3.

1.

2.

3.

4.

02.25.05



## Fire Station

## BKPV

I:/OFFICE/R-384

The floor plan shows a rectangular room with a dashed line indicating an 'OUTDOOR PATIO AREA' at the top. Inside the room, there is a round table with six chairs, a rectangular table with four chairs, and a long rectangular table with four chairs. A 'GEL' is located in the top left corner. A 'TV' is mounted on the left wall. The room is adjacent to a 'KITCHEN' on the left. Dimensions are marked: 16'-0" on the left wall, 24'-0" on the bottom wall, and 17'-0" on the left wall. A red diamond shape is labeled 'TV - WALL MOUNT'.

OFFICE/WORKSTATION: DAYROOM

DEPARTMENT: \_\_\_\_\_

AREA REQUIRED: 384SQ.FT

FURNITURE OPTIONS:

<input type="checkbox"/> WORKSURFACE CORNER	<input type="checkbox"/> FREE STANDING	<input type="checkbox"/> WALL MOUNTED
<input type="checkbox"/> WORKSURFACE L SHAPED	<input type="checkbox"/> FREE STANDING	<input type="checkbox"/> WALL MOUNTED
<input type="checkbox"/> SHELVING	<input type="checkbox"/> FREE STANDING	<input type="checkbox"/> WALL MOUNTED
<input type="checkbox"/> CLOSED SHELVING	<input type="checkbox"/> FREE STANDING	<input type="checkbox"/> WALL MOUNTED
<input type="checkbox"/> TASKLIGHTS		
<input type="checkbox"/> TACKBOARDS		
<input type="checkbox"/> IN/OUT PAPER MGMT.		
<input type="checkbox"/> TOOLBARS	<input type="checkbox"/> KEYBOARD	
<input type="checkbox"/> ADDITIONAL SEATING(QTY.)	<input type="checkbox"/> BOX.BOX.FILE(QTY)	
<input type="checkbox"/> CONFERENCE TABLE	<input type="checkbox"/> FILE.FILE(QTY)	
<input type="checkbox"/> MARKER BOARD	<input type="checkbox"/> LATERAL FILE	

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING: \_\_\_\_\_

LINEAL FEET OF STORAGE: \_\_\_\_\_

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

<input type="checkbox"/> PHONE	<input type="checkbox"/> MICRO FICHE'
<input type="checkbox"/> COMPUTER	<input type="checkbox"/> CALCULATOR
<input type="checkbox"/> LAZER-PRINTER	<input type="checkbox"/> TASK LIGHTS
<input type="checkbox"/> COPY/COLLATE	<input type="checkbox"/> PROJECTION SCREEN
<input type="checkbox"/> SLIDE/OVERHEAD	<input type="checkbox"/> DATA OUTLETS
<input type="checkbox"/> SHEDDER	<input type="checkbox"/> OTHER

SPECIAL HVAC REQUIREMENTS

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

SECURITY REQUIRED:

## BKV GROUP

FILE

OFFICE/WORKSTATION: OFFICE/WORKSTATION

DEPARTMENT: DEPARTMENT

AREA REQUIRED: 450SQ.FT.

FURNITURE OPTIONS:

<input checked="" type="checkbox"/> WORKSURFACE CORNER	<input type="checkbox"/> FREE STANDING	<input type="checkbox"/> WALL MOUNTED
<input checked="" type="checkbox"/> WORKSURFACE L SHAPED	<input type="checkbox"/> FREE STANDING	<input type="checkbox"/> WALL MOUNTED
<input checked="" type="checkbox"/> SHELVING		
<input checked="" type="checkbox"/> CLOSED SHELVING		
<input checked="" type="checkbox"/> TASKLIGHTS		
<input checked="" type="checkbox"/> TACKBOARDS		
<input checked="" type="checkbox"/> IN/OUT PAPER MGMT.		
<input checked="" type="checkbox"/> TOOLBARS	<input checked="" type="checkbox"/> KEYBOARD	
<input checked="" type="checkbox"/> ADDITIONAL SEATING(QTY.)	<input checked="" type="checkbox"/> BOX,BOX,FILE(QTY.)	
<input checked="" type="checkbox"/> CONFERENCE TABLE	<input checked="" type="checkbox"/> FILE,FILE(QTY)	
<input checked="" type="checkbox"/> MARKER BOARD	<input checked="" type="checkbox"/> LATERAL FILE	

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING: LINEAL FEET

LINEAL FEET OF STORAGE: LINEAL FEET

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

<input checked="" type="checkbox"/> PHONE	<input checked="" type="checkbox"/> MICRO FICHE'
<input checked="" type="checkbox"/> COMPUTER	<input checked="" type="checkbox"/> CALCULATOR
<input checked="" type="checkbox"/> LAZER-PRINTER	<input checked="" type="checkbox"/> TASK LIGHTS
<input checked="" type="checkbox"/> COPY/COLLATE	<input checked="" type="checkbox"/> PROJECTION SCREEN
<input checked="" type="checkbox"/> SLIDE/OVERHEAD	<input checked="" type="checkbox"/> DATA OUTLETS
<input checked="" type="checkbox"/> SHEDDER	<input checked="" type="checkbox"/> OTHER

SPECIAL HVAC REQUIREMENTS

1. HVAC
2. HVAC
3. HVAC

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:

1. LINE1	3. LINE1
LINE2	LINE2
2. LINE1	4. LINE1
LINE2	LINE2

SECURITY REQUIRED: SECURITY,REQUIRED

02.25.05



## Fire Station

## PROGRAMMING FORM

BKPV

SPACE  
STANDARDS

I/OFFICE/R-545

	OFFICE/WORKSTATION: <u>EXERSIZE</u> DEPARTMENT: AREA REQUIRED: <u>545.SQ.FT</u>  FURNITURE OPTIONS: <input type="checkbox"/> WORKSURFACE CORNER <input type="checkbox"/> WORKSURFACE L SHAPED <input type="checkbox"/> SHELVING <input type="checkbox"/> FREE STANDING <input type="checkbox"/> WALL MOUNTED <input type="checkbox"/> CLOSED SHELVING <input type="checkbox"/> FREE STANDING <input type="checkbox"/> WALL MOUNTED <input type="checkbox"/> TASKLIGHTS <input type="checkbox"/> TACKBOARDS <input type="checkbox"/> IN/OUT PAPER MGMT. <input type="checkbox"/> KEYBOARD <input type="checkbox"/> TOOLBARS <input type="checkbox"/> BOX.BOX.FILE(QTY) <input type="checkbox"/> ADDITIONAL SEATING(QTY.) <input type="checkbox"/> FILE.FILE(QTY) <input type="checkbox"/> CONFERENCE TABLE <input type="checkbox"/> LATERAL FILE <input type="checkbox"/> MARKER BOARD  FILING AND STORAGE NEEDS: LINEAL FEET OF FILING: LINEAL FEET OF STORAGE:  SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT: <input type="checkbox"/> PHONE <input type="checkbox"/> MICRO FICHE' <input type="checkbox"/> COMPUTER <input type="checkbox"/> CALCULATOR <input type="checkbox"/> LAZER-PRINTER <input type="checkbox"/> TASK LIGHTS <input type="checkbox"/> COPY/COLLATE <input type="checkbox"/> PROJECTION SCREEN <input type="checkbox"/> SLIDE/OVERHEAD <input type="checkbox"/> DATA OUTLETS <input type="checkbox"/> SHEDDER <input type="checkbox"/> OTHER  SPECIAL HVAC REQUIREMENTS 1. 2. 3. CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH: 1. 3. 2. 4.  SECURITY REQUIRED:
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## PROGRAMMING FORM

BKPV

I/OFFICE/R-557

	OFFICE/WORKSTATION: <u>GEAR ROOM / MAINT</u> DEPARTMENT: AREA REQUIRED: <u>557.SQ.FT</u>  FURNITURE OPTIONS: <input type="checkbox"/> WORKSURFACE CORNER <input type="checkbox"/> WORKSURFACE L SHAPED <input type="checkbox"/> SHELVING <input type="checkbox"/> FREE STANDING <input type="checkbox"/> WALL MOUNTED <input type="checkbox"/> CLOSED SHELVING <input type="checkbox"/> FREE STANDING <input type="checkbox"/> WALL MOUNTED <input type="checkbox"/> TASKLIGHTS <input type="checkbox"/> TACKBOARDS <input type="checkbox"/> IN/OUT PAPER MGMT. <input type="checkbox"/> KEYBOARD <input type="checkbox"/> TOOLBARS <input type="checkbox"/> BOX.BOX.FILE(QTY) <input type="checkbox"/> ADDITIONAL SEATING(QTY.) <input type="checkbox"/> FILE.FILE(QTY) <input type="checkbox"/> CONFERENCE TABLE <input type="checkbox"/> LATERAL FILE <input type="checkbox"/> MARKER BOARD  FILING AND STORAGE NEEDS: LINEAL FEET OF FILING: LINEAL FEET OF STORAGE:  SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT: <input type="checkbox"/> PHONE <input type="checkbox"/> MICRO FICHE' <input type="checkbox"/> COMPUTER <input type="checkbox"/> CALCULATOR <input type="checkbox"/> LAZER-PRINTER <input type="checkbox"/> TASK LIGHTS <input type="checkbox"/> COPY/COLLATE <input type="checkbox"/> PROJECTION SCREEN <input type="checkbox"/> SLIDE/OVERHEAD <input type="checkbox"/> DATA OUTLETS <input type="checkbox"/> SHEDDER <input type="checkbox"/> OTHER  SPECIAL HVAC REQUIREMENTS 1. 2. 3. CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH: 1. 3. 2. 4.  SECURITY REQUIRED:
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02.25.05

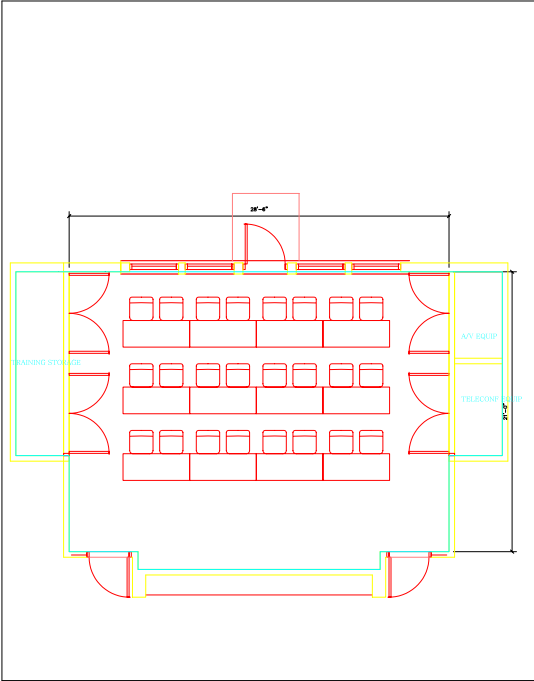
Fire Station

PROGRAMMING FORM

BKPV

SPACE STANDARDS

I:/OFFICE/R-733



OFFICE/WORKSTATION: TRAINING / BOC

DEPARTMENT:

AREA REQUIRED: 733.SQ.FT

FURNITURE OPTIONS:

☐ WORKSURFACE CORNER

☐ WORKSURFACE L SHAPED

☐ SHELVING

☐ CLOSED SHELVING

☐ TASKLIGHTS

☐ TACKBOARDS

☐ IN/OUT PAPER MGMT.

☐ TOOLBARS

☐ ADDITIONAL SEATING(QTY.)

☐ CONFERENCE TABLE

☐ MARKER BOARD

☐ FREE STANDING

☐ FREE STANDING

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☐ WALL MOUNTED

☐ WALL MOUNTED

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☐ KEYBOARD

☐ BOX.BOX.FILE(QTY)

☐ FILE.FILE(QTY)

☐ LATERAL FILE

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING:

LINEAL FEET OF STORAGE:

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

☐ PHONE

☐ COMPUTER

☐ LAZER-PRINTER

☐ COPY/COLLATE

☐ SLIDE/OVERHEAD

☐ SHEDDER

☐ MICRO FICHE'

☐ CALCULATOR

☐ TASK LIGHTS

☐ PROJECTION SCREEN

☐ DATA OUTLETS

☐ OTHER

1.

2.

3.

1.

2.

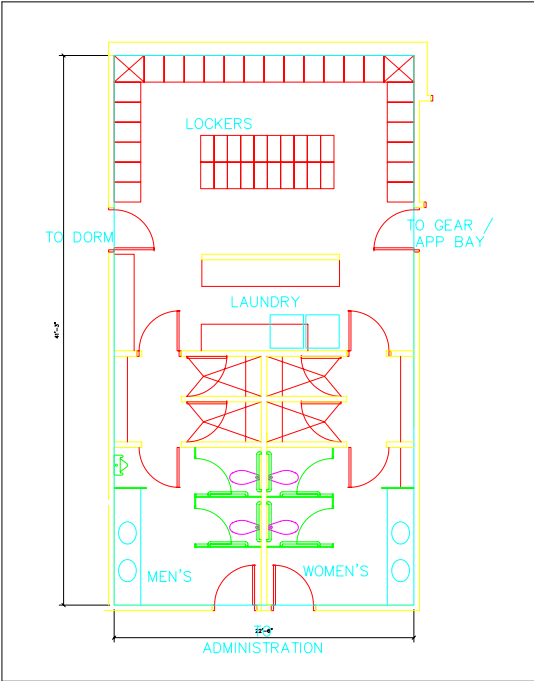
3.

4.

PROGRAMMING FORM

BKPV

I:/OFFICE/R-928



OFFICE/WORKSTATION: LOCKERS / TOILET

DEPARTMENT:

AREA REQUIRED: 928.SQ.FT

FURNITURE OPTIONS:

☐ WORKSURFACE CORNER

☐ WORKSURFACE L SHAPED

☐ SHELVING

☐ CLOSED SHELVING

☐ TASKLIGHTS

☐ TACKBOARDS

☐ IN/OUT PAPER MGMT.

☐ TOOLBARS

☐ ADDITIONAL SEATING(QTY.)

☐ CONFERENCE TABLE

☐ MARKER BOARD

☐ FREE STANDING

☐ FREE STANDING

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☐ WALL MOUNTED

☐ WALL MOUNTED

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☐ KEYBOARD

☐ BOX.BOX.FILE(QTY)

☐ FILE.FILE(QTY)

☐ LATERAL FILE

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING:

LINEAL FEET OF STORAGE:

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

☐ PHONE

☐ COMPUTER

☐ LAZER-PRINTER

☐ COPY/COLLATE

☐ SLIDE/OVERHEAD

☐ SHEDDER

☐ MICRO FICHE'

☐ CALCULATOR

☐ TASK LIGHTS

☐ PROJECTION SCREEN

☐ DATA OUTLETS

☐ OTHER

1.

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3.

1.

2.

3.

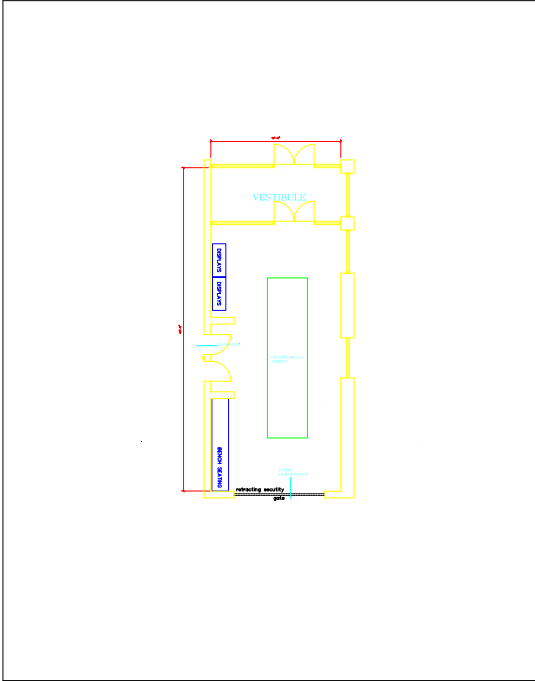
4.



PROGRAMMING FORM

BKV GROUP  
FILE

SPACE  
STANDARDS



OFFICE/WORKSTATION: OFFICE/WORKSTATION  
DEPARTMENT: DEPARTMENT  
AREA REQUIRED: SQ.FT.

FURNITURE OPTIONS:  
☒ WORKSURFACE CORNER  
☒ WORKSURFACE L SHAPED  
☒ SHELVING ☒ FREE STANDING ☒ WALL MOUNTED  
☒ CLOSED SHELVING ☒ FREE STANDING ☒ WALL MOUNTED  
☒ TASKLIGHTS  
☒ TACKBOARDS  
☒ IN/OUT PAPER MGMT. ☒ KEYBOARD  
☒ TOOLBARS ☒ BOX.BOX.FILE(QTY)  
☒ ADDITIONAL SEATING(QTY.) ☒ FILE.FILE(QTY)  
☒ CONFERENCE TABLE ☒ LATERAL FILE  
☒ MARKER BOARD

FILING AND STORAGE NEEDS:  
LINEAL FEET OF FILING: LINEAL FEET  
LINEAL FEET OF STORAGE: LINEAL FEET

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:  
☒ PHONE ☒ MICRO FICHE'  
☒ COMPUTER ☒ CALCULATOR  
☒ LAZER-PRINTER ☒ TASK LIGHTS  
☒ COPY/COLLATE ☒ PROJECTION SCREEN  
☒ SLIDE/OVERHEAD ☒ DATA OUTLETS  
☒ SHEDDER ☒ OTHER

SPECIAL HVAC REQUIREMENTS  
1. HVAC  
2. HVAC  
3. HVAC

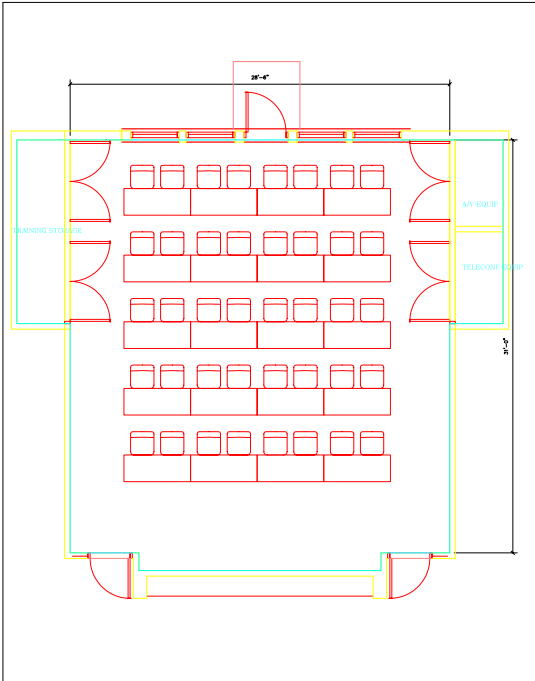
CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:  
1. LINE1 3. LINE1  
LINE2 LINE2  
2. LINE1 4. LINE1  
LINE2 LINE2

SECURITY REQUIRED: SECURITY REQUIRED

PROGRAMMING FORM

BKPV

I:/OFFICE/R-1018



OFFICE/WORKSTATION: TRAINING / EOC  
DEPARTMENT:  
AREA REQUIRED: 1018.SQ.FT

FURNITURE OPTIONS:  
☐ WORKSURFACE CORNER  
☐ WORKSURFACE L SHAPED  
☐ SHELVING ☐ FREE STANDING ☐ WALL MOUNTED  
☐ CLOSED SHELVING ☐ FREE STANDING ☐ WALL MOUNTED  
☐ TASKLIGHTS  
☐ TACKBOARDS  
☐ IN/OUT PAPER MGMT. ☐ KEYBOARD  
☐ TOOLBARS ☐ BOX.BOX.FILE(QTY)  
☐ ADDITIONAL SEATING(QTY.) ☐ FILE.FILE(QTY)  
☐ CONFERENCE TABLE ☐ LATERAL FILE  
☐ MARKER BOARD

FILING AND STORAGE NEEDS:  
LINEAL FEET OF FILING:  
LINEAL FEET OF STORAGE:

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:  
☐ PHONE ☐ MICRO FICHE'  
☐ COMPUTER ☐ CALCULATOR  
☐ LAZER-PRINTER ☐ TASK LIGHTS  
☐ COPY/COLLATE ☐ PROJECTION SCREEN  
☐ SLIDE/OVERHEAD ☐ DATA OUTLETS  
☐ SHEDDER ☐ OTHER

SPECIAL HVAC REQUIREMENTS  
1.  
2.  
3.

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:  
1. 3.  
2. 4.

SECURITY REQUIRED:



Fire Station

PROGRAMMING FORM

BKV GROUP  
I/OFFICE/R-1880

SPACE  
STANDARDS

47'-0"

40'-0"

TO GEAR ROOM / STATION QUARTERS

ENGINE 34'

20' BAY

20' BAY

AMBULANCE 25'

OFFICE/WORKSTATION: APPARATUS BAYS

DEPARTMENT:

AREA REQUIRED: 1880 SQ.FT

FURNITURE OPTIONS:

<input type="checkbox"/> WORKSURFACE CORNER	
<input type="checkbox"/> WORKSURFACE L SHAPED	
<input type="checkbox"/> SHELVING	<input type="checkbox"/> FREE STANDING <input type="checkbox"/> WALL MOUNTED
<input type="checkbox"/> CLOSED SHELVING	<input type="checkbox"/> FREE STANDING <input type="checkbox"/> WALL MOUNTED
<input type="checkbox"/> TASKLIGHTS	
<input type="checkbox"/> TACKBOARDS	
<input type="checkbox"/> IN/OUT PAPER MGMT.	
<input type="checkbox"/> TOOLBARS	<input type="checkbox"/> KEYBOARD
<input type="checkbox"/> ADDITIONAL SEATING(QTY.)	<input type="checkbox"/> BOX,BOX,FILE(QTY)
<input type="checkbox"/> CONFERENCE TABLE	<input type="checkbox"/> FILE,FILE(QTY)
<input type="checkbox"/> MARKER BOARD	<input type="checkbox"/> LATERAL FILE

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING:

LINEAL FEET OF STORAGE:

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

<input type="checkbox"/> PHONE	<input type="checkbox"/> MICRO FICHE'
<input type="checkbox"/> COMPUTER	<input type="checkbox"/> CALCULATOR
<input type="checkbox"/> LASER-PRINTER	<input type="checkbox"/> TASK LIGHTS
<input type="checkbox"/> COPY/COLLATE	<input type="checkbox"/> PROJECTION SCREEN
<input type="checkbox"/> SLIDE/OVERHEAD	<input type="checkbox"/> DATA OUTLETS
<input type="checkbox"/> SHEDDER	<input type="checkbox"/> OTHER

SPECIAL HVAC REQUIREMENTS

1.

2.

3.

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:

1.

3.

2.

4.

SECURITY REQUIRED:

PROGRAMMING FORM

BKV GROUP  
I/OFFICE/R-6400

80'-0"

80'-0"

TO GEAR ROOM / DOWN

RESCUE 26'

ENGINE 34'

22' BAY

Pick-Up

18' BAY

AMBULANCE 25'

LADDER

22' BAY

Shift Commander

SUBA / EQUIPMENT WASH / STORAGE

OFFICE/WORKSTATION: APPARATUS BAYS

DEPARTMENT:

AREA REQUIRED: 6400 SQ.FT

FURNITURE OPTIONS:

<input type="checkbox"/> WORKSURFACE CORNER	
<input type="checkbox"/> WORKSURFACE L SHAPED	
<input type="checkbox"/> SHELVING	<input type="checkbox"/> FREE STANDING <input type="checkbox"/> WALL MOUNTED
<input type="checkbox"/> CLOSED SHELVING	<input type="checkbox"/> FREE STANDING <input type="checkbox"/> WALL MOUNTED
<input type="checkbox"/> TASKLIGHTS	
<input type="checkbox"/> TACKBOARDS	
<input type="checkbox"/> IN/OUT PAPER MGMT.	
<input type="checkbox"/> TOOLBARS	<input type="checkbox"/> KEYBOARD
<input type="checkbox"/> ADDITIONAL SEATING(QTY.)	<input type="checkbox"/> BOX,BOX,FILE(QTY)
<input type="checkbox"/> CONFERENCE TABLE	<input type="checkbox"/> FILE,FILE(QTY)
<input type="checkbox"/> MARKER BOARD	<input type="checkbox"/> LATERAL FILE

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING:

LINEAL FEET OF STORAGE:

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

<input type="checkbox"/> PHONE	<input type="checkbox"/> MICRO FICHE'
<input type="checkbox"/> COMPUTER	<input type="checkbox"/> CALCULATOR
<input type="checkbox"/> LASER-PRINTER	<input type="checkbox"/> TASK LIGHTS
<input type="checkbox"/> COPY/COLLATE	<input type="checkbox"/> PROJECTION SCREEN
<input type="checkbox"/> SLIDE/OVERHEAD	<input type="checkbox"/> DATA OUTLETS
<input type="checkbox"/> SHEDDER	<input type="checkbox"/> OTHER

SPECIAL HVAC REQUIREMENTS

1.

2.

3.

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:

1.

3.

2.

4.

SECURITY REQUIRED:

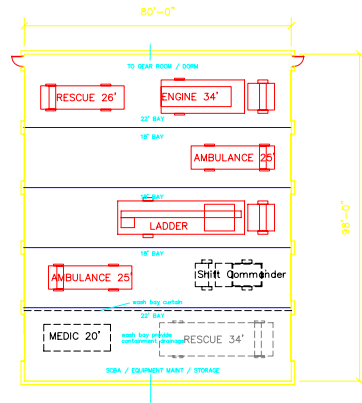
## Fire Station

PROGRAMMING FORM

BKV GROUP

I:/OFFICE/R-7840

## SPACE STANDARDS

OFFICE/WORKSTATION: APPARATUS BAYS

DEPARTMENT:

AREA REQUIRED: 7840 SQ.FT

FURNITURE OPTIONS:

- ☐ WORKSURFACE CORNER  
☐ WORKSURFACE L SHAPED  
☐ SHELVING ☐ FREE STANDING ☐ WALL MOUNTED  
☐ CLOSED SHELVING ☐ FREE STANDING ☐ WALL MOUNTED  
☐ TASKLIGHTS  
☐ TACKBOARDS  
☐ IN/OUT PAPER MGMT.  
☐ TOOLBARS ☐ KEYBOARD  
☐ ADDITIONAL SEATING(QTY.) ☐ BOX,BOX.FILE(QTY)  
☐ CONFERENCE TABLE ☐ FILE,FILE(QTY)  
☐ MARKER BOARD ☐ LATERAL FILE

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING:

LINEAL FEET OF STORAGE:

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

- |   |  |
|---|--|
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| <input type="checkbox"/> COMPUTER       | <input type="checkbox"/> CALCULATOR        |
| <input type="checkbox"/> LASER-PRINTER  | <input type="checkbox"/> TASK LIGHTS       |
| <input type="checkbox"/> COPY/COLLATE   | <input type="checkbox"/> PROJECTION SCREEN |
| <input type="checkbox"/> SLIDE/OVERHEAD | <input type="checkbox"/> DATA OUTLETS      |
| <input type="checkbox"/> SHEDDER        | <input type="checkbox"/> OTHER             |

## SPECIAL HVAC REQUIREMENTS

- 1.
- 2.

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:

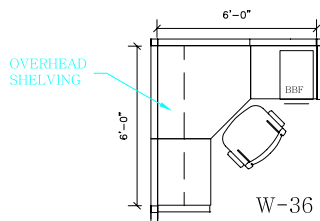
- 1.
- 2.
- 3.
- 4.

SECURITY REQUIRED:

PROGRAMMING FORM

BKPV

I:/OFFICE/W-36



OFFICE/WORKSTATION: WORKSTATION

DEPARTMENT:

AREA REQUIRED: 36.SQ.FT

FURNITURE OPTIONS:

- ☐ WORKSURFACE CORNER  
☐ WORKSURFACE L SHAPED  
☐ SHELVING ☐ FREE STANDING ☐ WALL MOUNTED  
☐ CLOSED SHELVING ☐ FREE STANDING ☐ WALL MOUNTED  
☐ TASKLIGHTS  
☐ TACKBOARDS  
☐ IN/OUT PAPER MGMT.  
☐ TOOLBARS ☐ KEYBOARD  
☐ ADDITIONAL SEATING(QTY.) ☐ BOX,BOX.FILE(QTY)  
☐ CONFERENCE TABLE ☐ FILE.FILE(QTY)  
☐ MARKER BOARD ☐ LATERAL FILE

FILING AND STORAGE NEEDS:

LINEAL FEET OF FILING:

LINEAL FEET OF STORAGE:

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:

- |                          |                |                          |                   |
|--------------------------|----------------|--------------------------|-------------------|
| <input type="checkbox"/> | PHONE          | <input type="checkbox"/> | MICRO FICHE'      |
| <input type="checkbox"/> | COMPUTER       | <input type="checkbox"/> | CALCULATOR        |
| <input type="checkbox"/> | LAZER-PRINTER  | <input type="checkbox"/> | TASK LIGHTS       |
| <input type="checkbox"/> | COPY/COLLATE   | <input type="checkbox"/> | PROJECTION SCREEN |
| <input type="checkbox"/> | SLIDE/OVERHEAD | <input type="checkbox"/> | DATA OUTLETS      |
| <input type="checkbox"/> | SHEDDER        | <input type="checkbox"/> | OTHER             |

## SPECIAL HVAC REQUIREMENTS

- 1.
- 2.

CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:

1. \_\_\_\_\_ 3. \_\_\_\_\_
2. \_\_\_\_\_ 4. \_\_\_\_\_

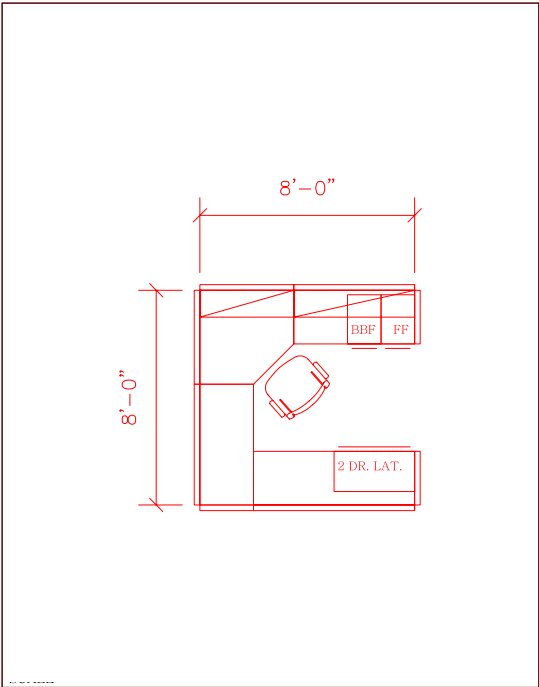
SECURITY REQUIRED:



PROGRAMMING FORM

BKV GROUP  
FILE

SPACE  
STANDARDS



OFFICE/WORKSTATION: OFFICE/WORKSTATION  
DEPARTMENT: DEPARTMENT  
AREA REQUIRED: SQ.FT.

FURNITURE OPTIONS:  
☒ WORKSURFACE CORNER  
☒ WORKSURFACE L SHAPED  
☒ SHELVING ☒ FREE STANDING ☒ WALL MOUNTED  
☒ CLOSED SHELVING ☒ FREE STANDING ☒ WALL MOUNTED  
☒ TASKLIGHTS  
☒ TACKBOARDS  
☒ IN/OUT PAPER MGMT. ☒ KEYBOARD  
☒ TOOLBARS ☒ BOX.BOX.FILE(QTY)  
☒ ADDITIONAL SEATING(QTY.) ☒ FILE.FILE(QTY)  
☒ CONFERENCE TABLE ☒ LATERAL FILE  
☒ MARKER BOARD

FILING AND STORAGE NEEDS:  
LINEAL FEET OF FILING: LINEAL FEET  
LINEAL FEET OF STORAGE: LINEAL FEET

SPECIAL ELECTRICAL REQUIREMENTS AND EQUIPMENT:  
☒ PHONE ☒ MICRO FICHE  
☒ COMPUTER ☒ CALCULATOR  
☒ LAZER-PRINTER ☒ TASK LIGHTS  
☒ COPY/COLLATE ☒ PROJECTION SCREEN  
☒ SLIDE/OVERHEAD ☒ DATA OUTLETS  
☒ SHEDDER ☒ OTHER

SPECIAL HVAC REQUIREMENTS  
1. HVAC  
2. HVAC  
3. HVAC

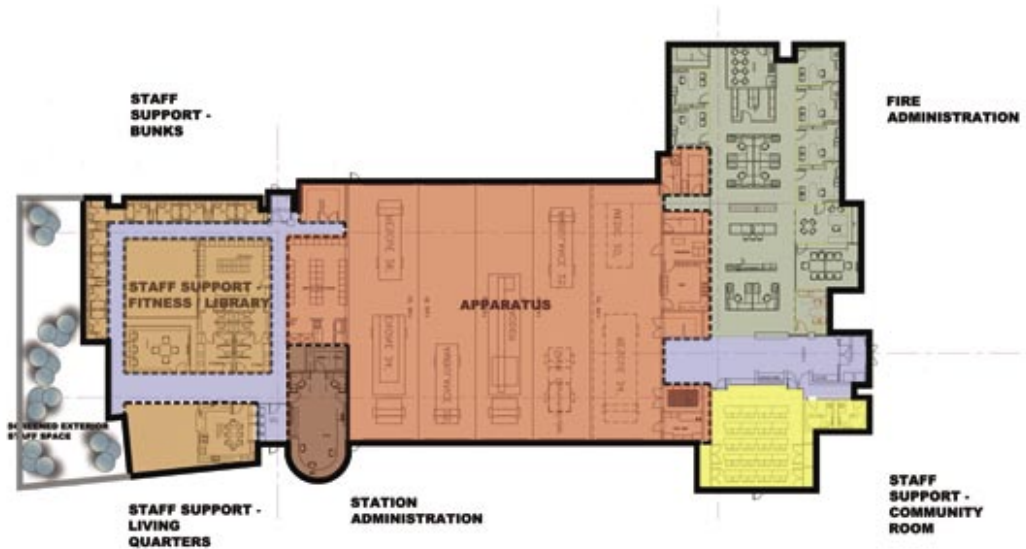
CRITICAL PHYSICAL ADJACENCY REQUIREMENT WITH:  
1. LINE1 3. LINE1  
LINE2 LINE2  
2. LINE1 4. LINE1  
LINE2 LINE2

SECURITY REQUIRED: SECURITY REQUIRED

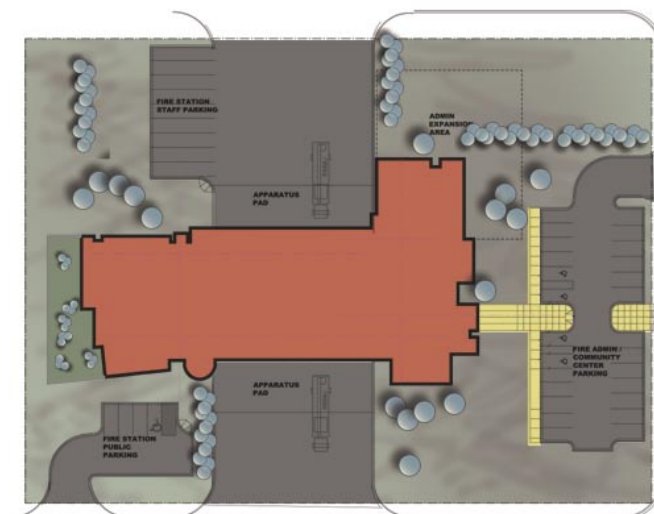
## Concept Station Plans and "Fit" Concept Site Plans

The following diagrams depict preliminary plan concepts for the Plan Options 1, 2, 3A, 3B, and 4 as programmed in this report. The plan diagrams are used to validate the space program, while the "Fit" site plans are used to determine site configuration and area requirements used in the assessment of the preliminary and final sites selected.

## CONCEPT STATION PLANS AND "FIT" CONCEPT SITE PLANS



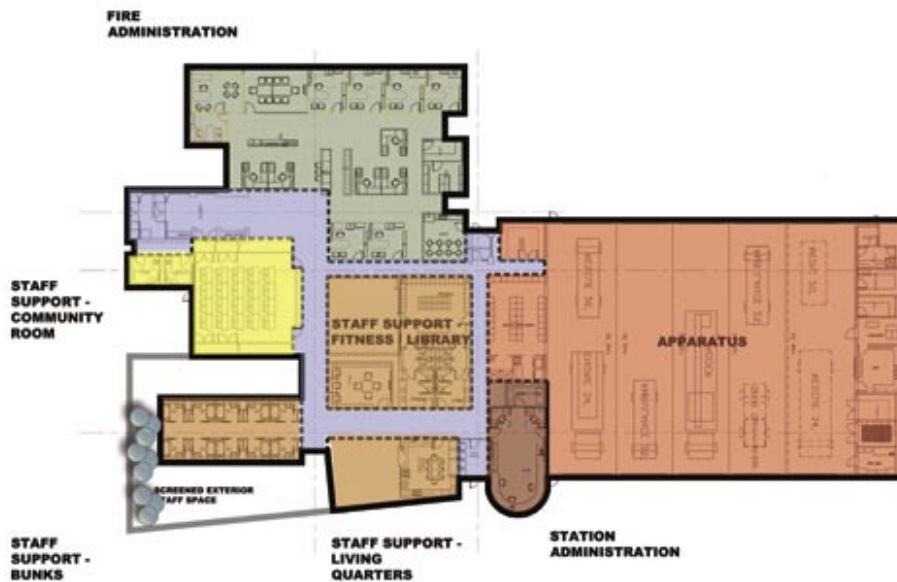
### GRAND ISLAND FIRE DEPARTMENT OPTION 1 - HEADQUARTER FIRE STATION



GRAND ISLAND FIRE DEPARTMENT  
OPTION 1 -  
HEADQUARTER FIRE STATION SITE PLAN  
2.25 - 3 ACRES  
12/17/04

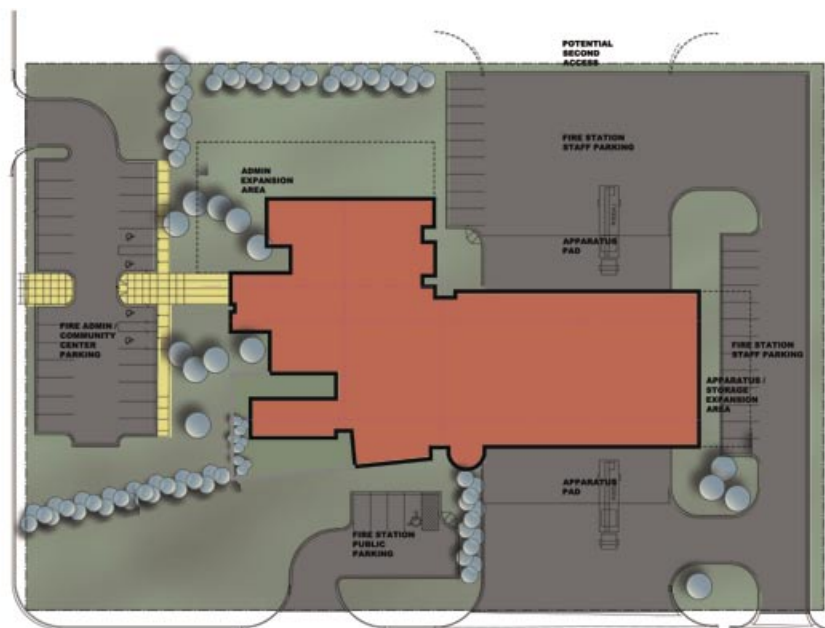
02.25.05

**CONCEPT  
STATION  
PLANS  
AND "FIT"  
CONCEPT  
SITE PLANS**



**GRAND ISLAND FIRE DEPARTMENT  
OPTION 2 -  
HEADQUARTER FIRE STATION**

12/17/04

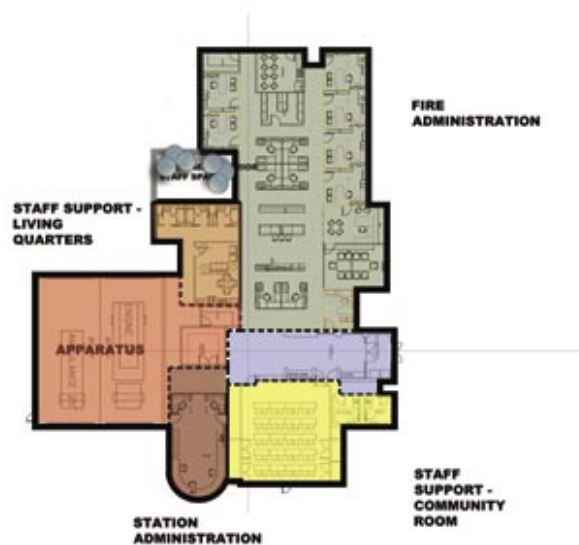


**GRAND ISLAND FIRE DEPARTMENT  
OPTION 2 -  
HEADQUARTER FIRE STATION SITE PLAN**

2.25 - 3 ACRES  
12/17/04

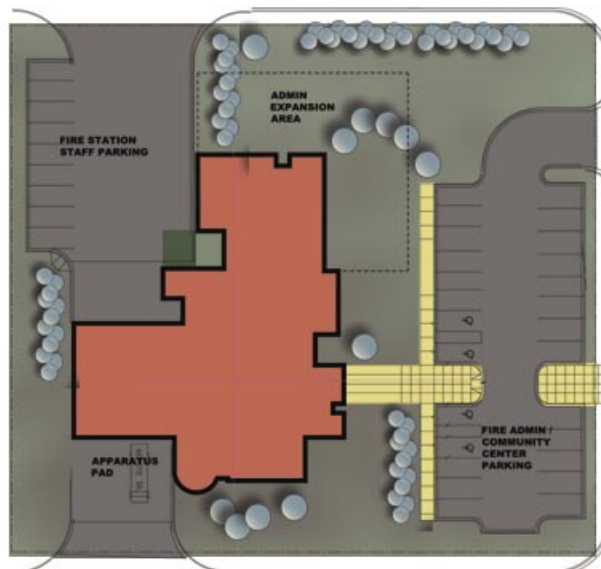
02.25.05

## CONCEPT STATION PLANS AND "FIT" CONCEPT SITE PLANS



### GRAND ISLAND FIRE DEPARTMENT OPTION 3A - FIRE ADMINISTRATION

12/17/04

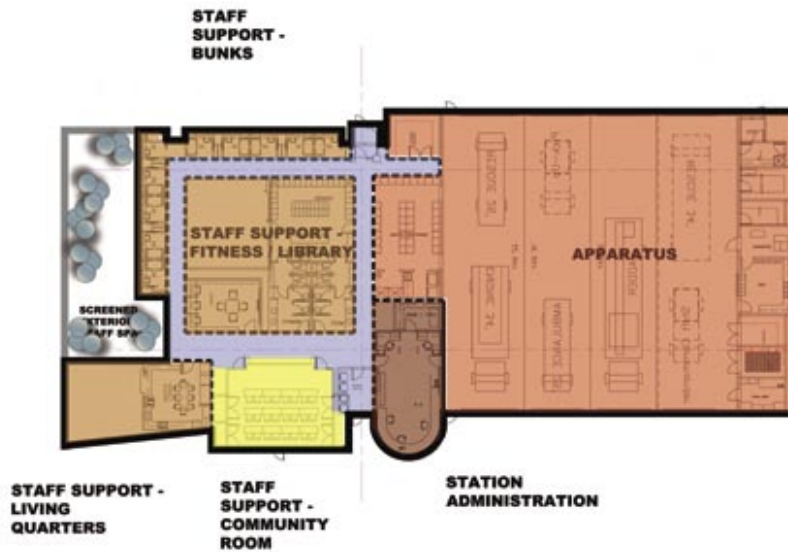


### GRAND ISLAND FIRE DEPARTMENT OPTION 3A - FIRE ADMINISTRATION SITE PLAN

1.25 - 1.75 ACRES  
12/17/04

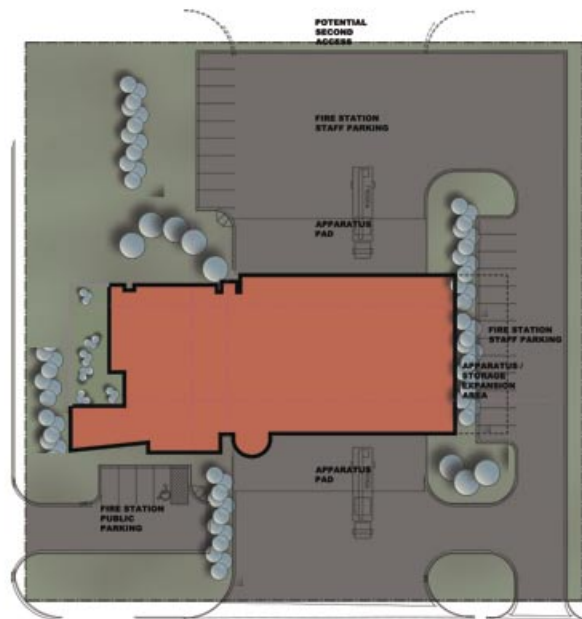
02.25.05

**CONCEPT  
STATION  
PLANS  
AND "FIT"  
CONCEPT  
SITE PLANS**



**GRAND ISLAND FIRE DEPARTMENT  
OPTION 3B -  
FIRE STATION NO 1**

12/17/04



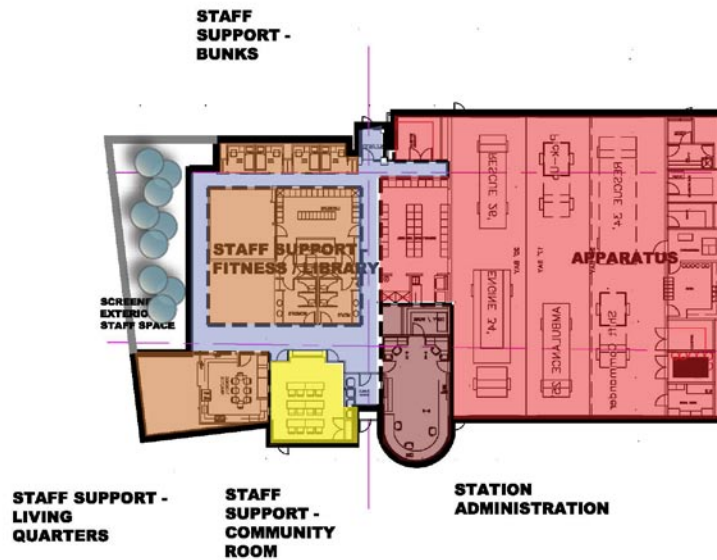
**GRAND ISLAND FIRE DEPARTMENT  
OPTION 3B -  
FIRE STATION NO 1 SITE PLAN**

1.75 - 2.5 ACRES  
12/17/04

02.25.05

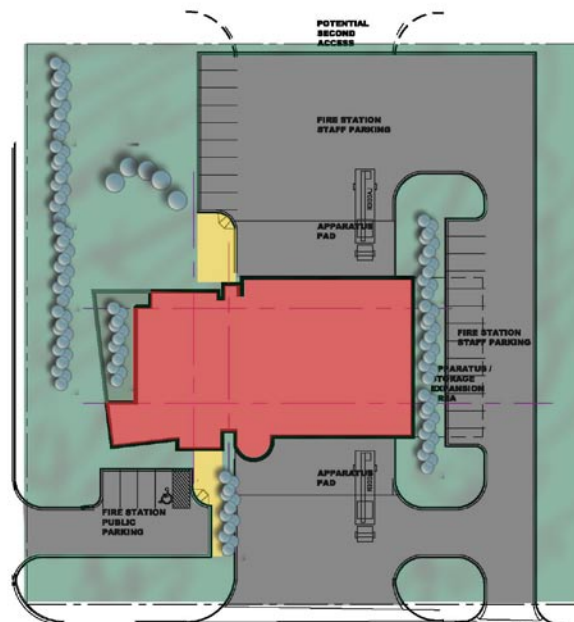


## CONCEPT STATION PLANS AND "FIT" CONCEPT SITE PLANS



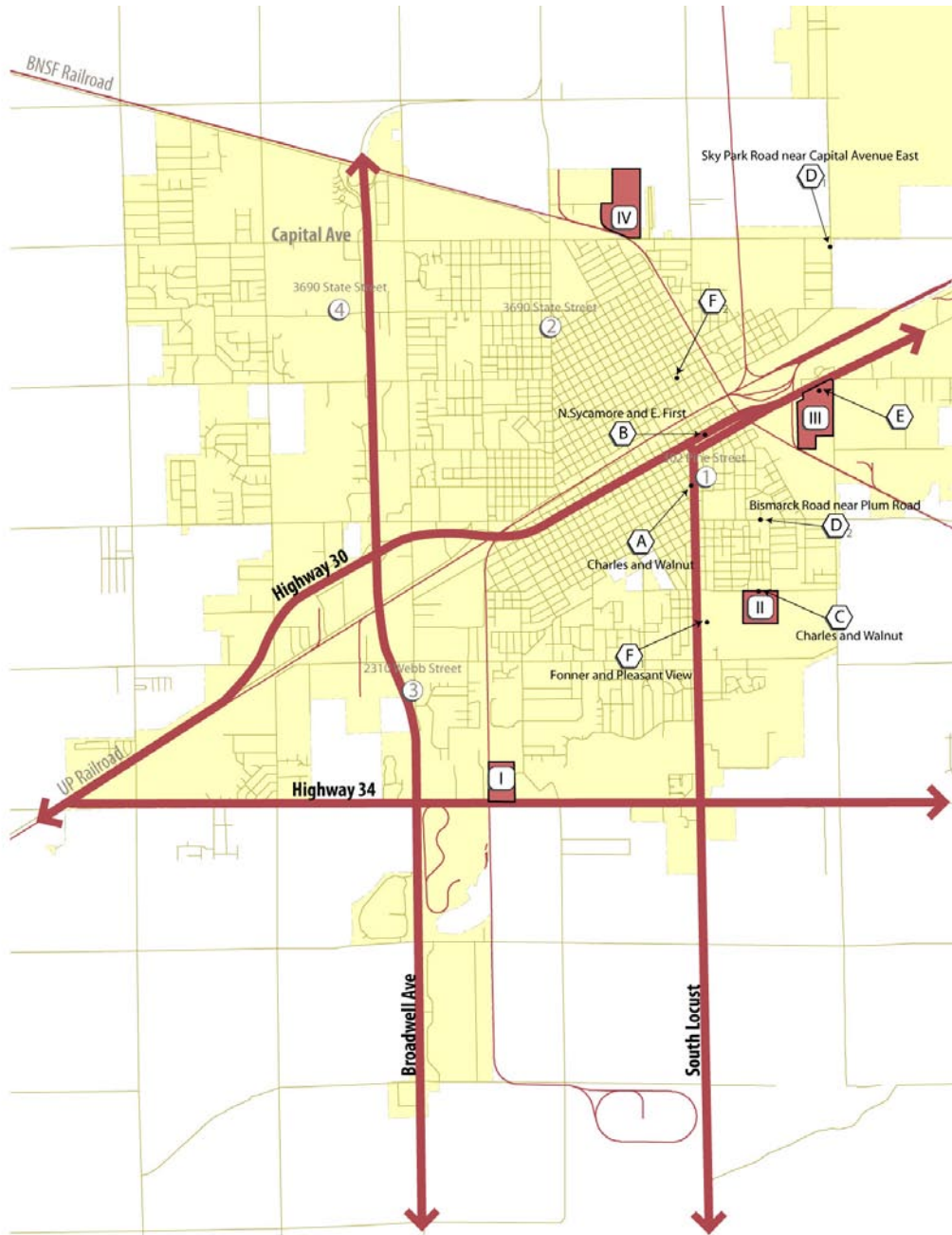
### GRAND ISLAND FIRE DEPARTMENT OPTION 4 - FIRE STATION NO 1 AND 2 (3) BAY

2/3/05



### GRAND ISLAND FIRE DEPARTMENT OPTION 4 - FIRE STATION NO 1 SITE PLAN 1.75 - 2.5 ACRES 2/3/04

02.25.05



## SITE IDENTIFICATION MAPPING

### Site Identification Mapping

The map depicts the sites selected for preliminary and final site assessment based on the Fire and EMS Services Facility and Location Study included in Section 3 of this report.

### Fire Station Sites

- # Existing Fire Station
- ⬡ Proposed Fire Station Sites

City of Grand Island, Nebraska

**RDg**  
PLANNING • DESIGN

02.25.05

### **Site Infrastructure and Criteria**

The following diagrams depict existing infrastructural conditions, land-use and zoning for each of the sites reviewed for potential Fire Station locations. The information provided formed the basis for the assessment / discussion points included for each site in the Preliminary Site Master Plan Concepts.

## **SITE AND INFRASTRUCTURE CRITERIA**

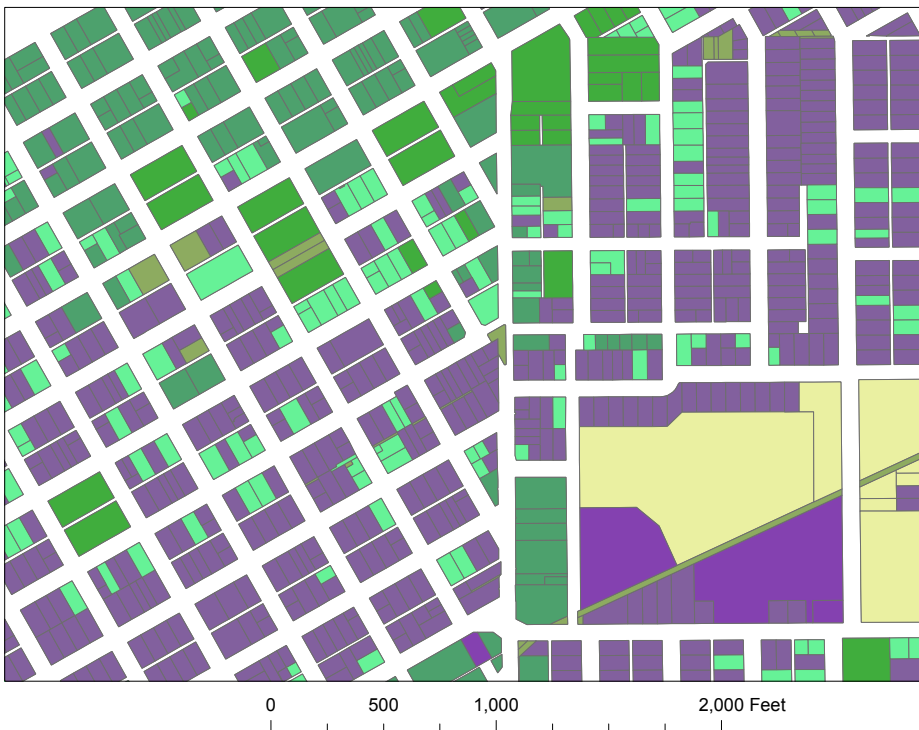
Site A



## SITE AND INFRASTRUCTURE CRITERIA

- Water\_Hydrants
- Storm\_Intake
- Sanitary\_Manhole
- Water\_Pipes
- Storm\_Pipe
- Sanitary\_Pipe
- Storm\_Channel
- Parcels

Site A



## Existing Land Use

- <all other values>
- EX\_ACR
- EX\_AG COMM
- EX\_AGStore
- EX\_Agriculture
- EX\_Cemetery
- EX\_Church
- EX\_DTCOFF
- EX\_Fm
- EX\_HC
- EX\_ITC
- EX\_LI
- EX\_MobileHomes
- EX\_MultiFamily1
- EX\_PR
- EX\_PUBBuild
- EX\_PUBSchool
- EX\_SingleFamily
- EX\_VacantCorp
- PAR-LIN

02.25.05



Site B



## SITE AND INFRASTRUCTURE CRITERIA

- Water\_Hydrants
- Storm\_Intake
- Sanitary\_Manhole
- Water\_Pipes
- Storm\_Pipe
- Sanitary\_Pipe
- Storm\_Channel
- Parcels

Site B

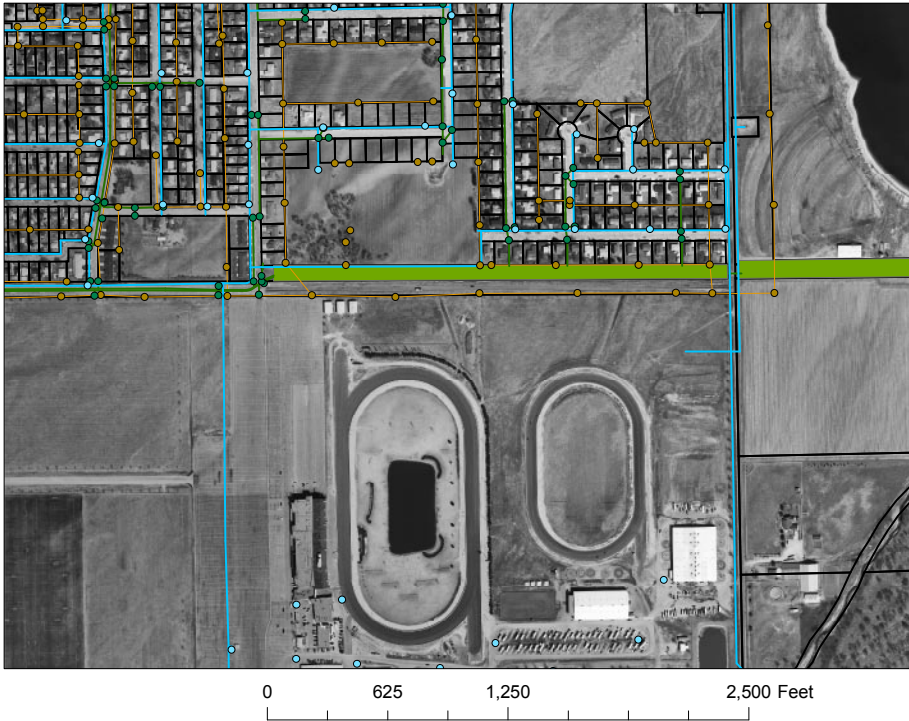


## Existing Land Use

- <all other values>
- EX\_ACR
- EX\_AG COMM
- EX\_AGStore
- EX\_Agriculture
- EX\_Cemetery
- EX\_Church
- EX\_DTCOFF
- EX\_Fm
- EX\_HC
- EX\_ITC
- EX\_LI
- EX\_MobileHomes
- EX\_MultiFamily1
- EX\_PR
- EX\_PUBBuild
- EX\_PUBSchool
- EX\_SingleFamily
- EX\_VacantCorp
- PAR-LIN

02.25.05

Site C



## SITE AND INFRASTRUCTURE CRITERIA

- Water\_Hydrants
- Storm\_Intake
- Sanitary\_Manhole
- Water\_Pipes
- Storm\_Pipe
- Sanitary\_Pipe
- Storm\_Channel
- Parcels

Site C



## Existing Land Use

- <all other values>
- EX\_ACR
- EX\_AG COMM
- EX\_AGStore
- EX\_Agriculture
- EX\_Cemetery
- EX\_Church
- EX\_DTCCOFF
- EX\_Fm
- EX\_HC
- EX\_ITC
- EX\_LI
- EX\_MobileHomes
- EX\_MultiFamily1
- EX\_PR
- EX\_PUBBuild
- EX\_PUBSchool
- EX\_SingleFamily
- EX\_VacantCorp
- PAR-LIN

02.25.05

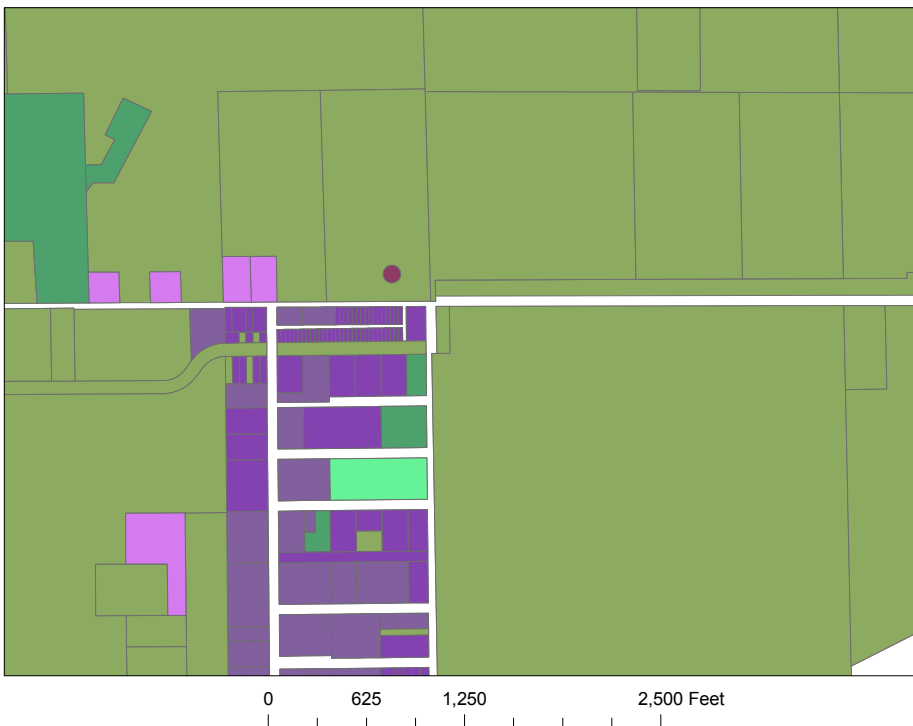
Site D1



## SITE AND INFRASTRUCTURE CRITERIA

- Water\_Hydrants
- Storm\_Intake
- Sanitary\_Manhole
- Water\_Pipes
- Storm\_Pipe
- Sanitary\_Pipe
- Storm\_Channel
- Parcels

Site D1



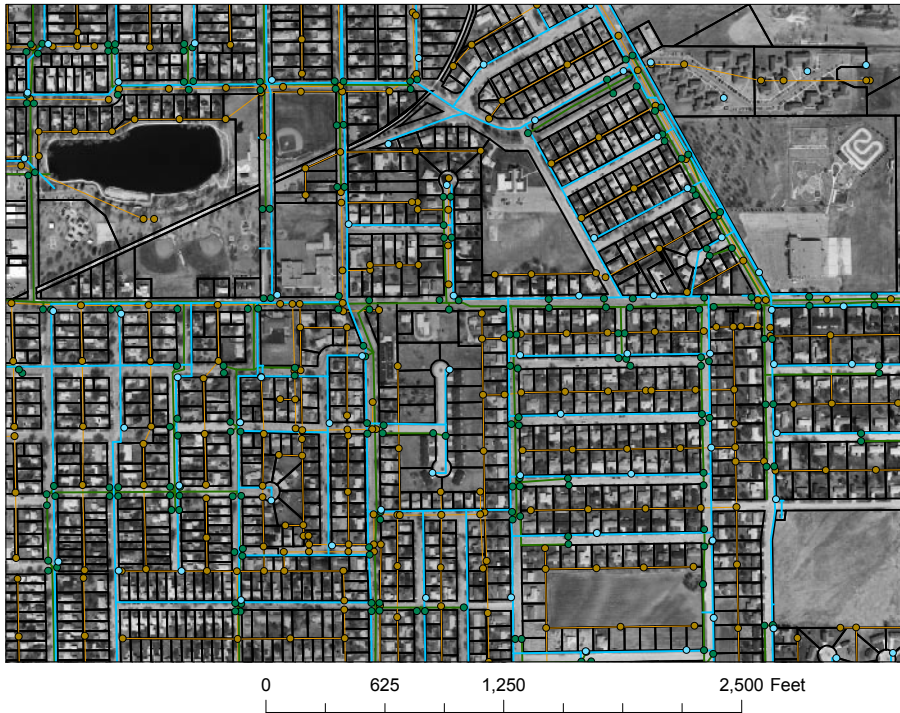
## Existing Land Use

- <all other values>
- EX\_ACR
- EX\_AG COMM
- EX\_AGStore
- EX\_Agriculture
- EX\_Cemetery
- EX\_Church
- EX\_DTCCOFF
- EX\_Fm
- EX\_HC
- EX\_ITC
- EX\_LI
- EX\_MobileHomes
- EX\_MultiFamily1
- EX\_PR
- EX\_PUBBuild
- EX\_PUBSchool
- EX\_SingleFamily
- EX\_VacantCorp
- PAR-LIN

02.25.05



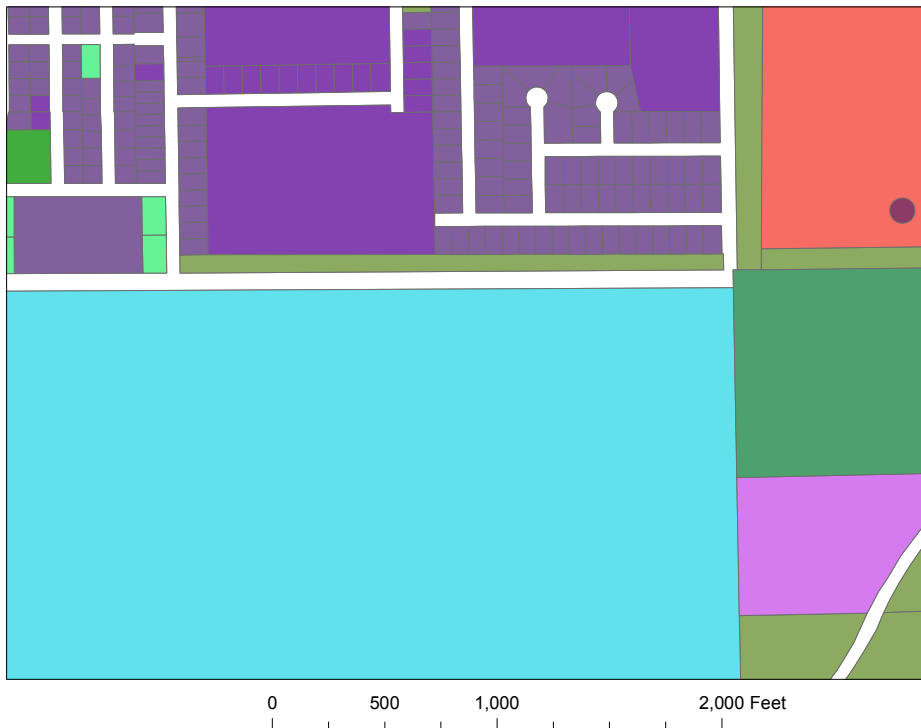
Site D2



## SITE AND INFRASTRUCTURE CRITERIA

- Water\_Hydrants
- Storm\_Intake
- Sanitary\_Manhole
- Water\_Pipes
- Storm\_Pipe
- Sanitary\_Pipe
- Storm\_Channel
- Parcels

Site D2



## Existing Land Use

- <all other values>
- EX\_ACR
- EX\_AG COMM
- EX\_AGStore
- EX\_Agriculture
- EX\_Cemetery
- EX\_Church
- EX\_DTCCOFF
- EX\_Fm
- EX\_HC
- EX\_ITC
- EX\_LI
- EX\_MobileHomes
- EX\_MultiFamily1
- EX\_PR
- EX\_PUBBuild
- EX\_PUBSchool
- EX\_SingleFamily
- EX\_VacantCorp
- PAR-LIN

02.25.05

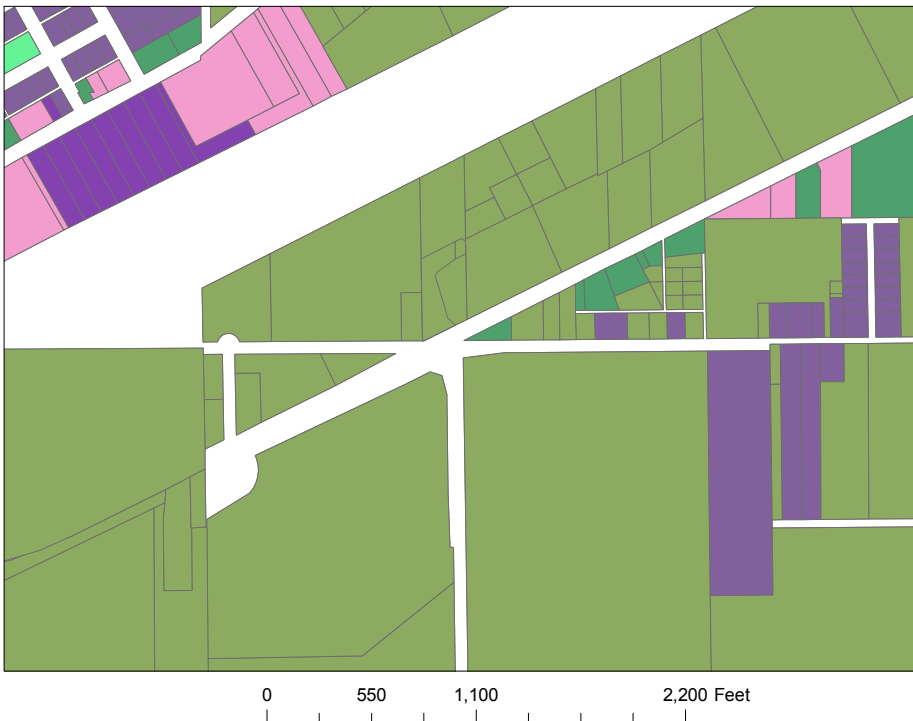
Site E



## SITE AND INFRASTRUCTURE CRITERIA

- Water\_Hydrants
- Storm\_Intake
- Sanitary\_Manhole
- Water\_Pipes
- Storm\_Pipe
- Sanitary\_Pipe
- Storm\_Channel
- Parcels

Site E

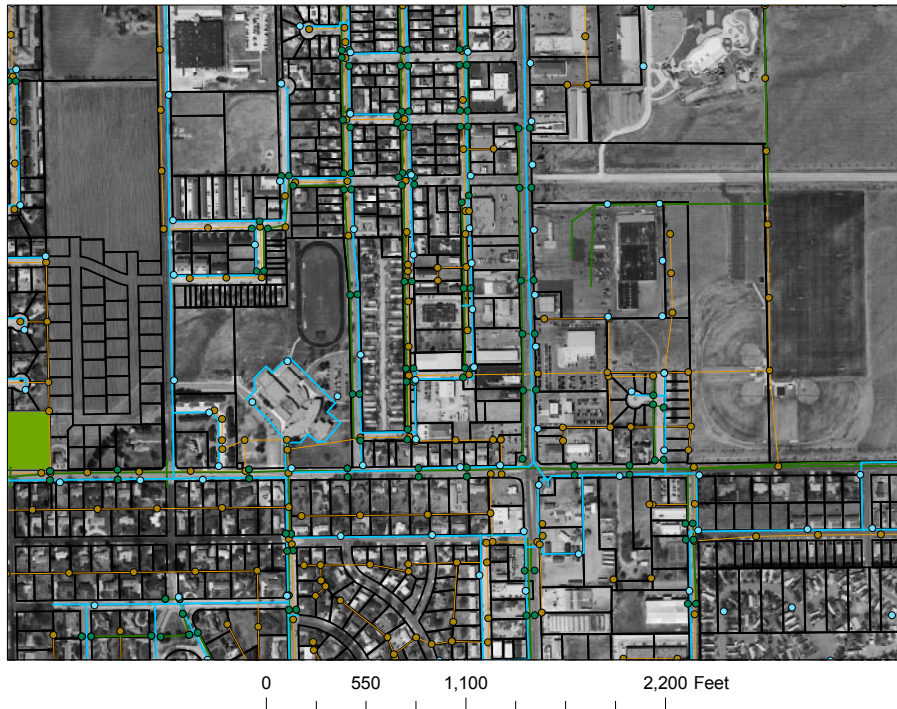


### Existing Land Use

- <all other values>
- EX\_ACR
- EX\_AG COMM
- EX\_AGStore
- EX\_Agriculture
- EX\_Cemetery
- EX\_Church
- EX\_DTCOFF
- EX\_Fm
- EX\_HC
- EX\_ITC
- EX\_LI
- EX\_MobileHomes
- EX\_MultiFamily1
- EX\_PR
- EX\_PUBBuild
- EX\_PUBSchool
- EX\_SingleFamily
- EX\_VacantCorp
- PAR-LIN

02.25.05

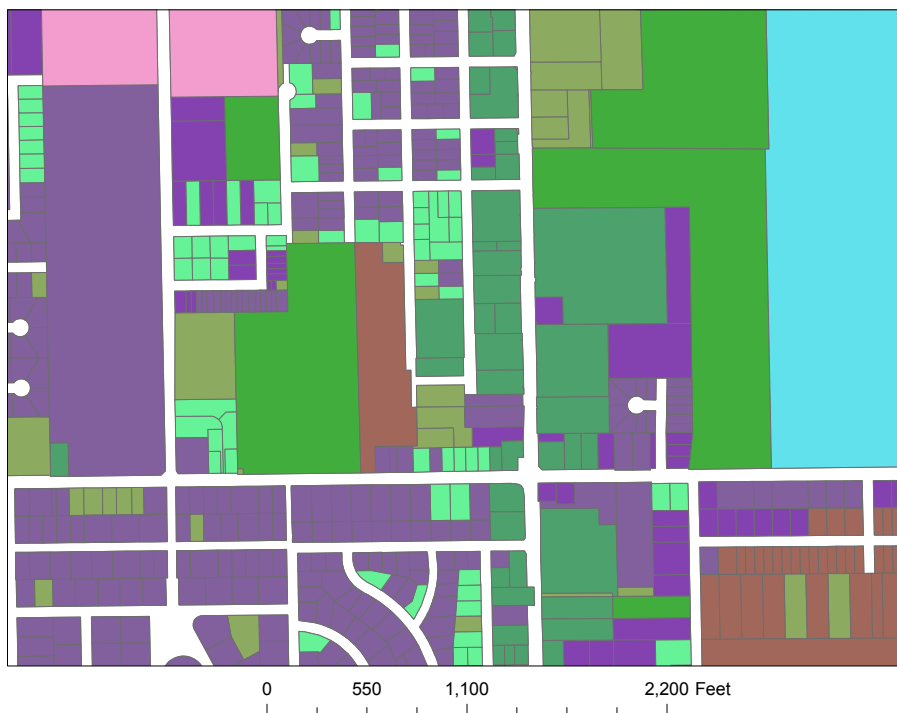
Site F1



## SITE AND INFRASTRUCTURE CRITERIA

- Water\_Hydrants
- Storm\_Intake
- Sanitary\_Manhole
- Water\_Pipes
- Storm\_Pipe
- Sanitary\_Pipe
- Storm\_Channel
- Parcels

Site F1



### Existing Land Use

- <all other values>
- EX\_ACR
- EX\_AG COMM
- EX\_AGStore
- EX\_Agriculture
- EX\_Cemetery
- EX\_Church
- EX\_DTCOFF
- EX\_Fm
- EX\_HC
- EX\_ITC
- EX\_LI
- EX\_MobileHomes
- EX\_MultiFamily1
- EX\_PR
- EX\_PUBBuild
- EX\_PUBSchool
- EX\_SingleFamily
- EX\_VacantCorp
- PAR-LIN

02.25.05



Site F2

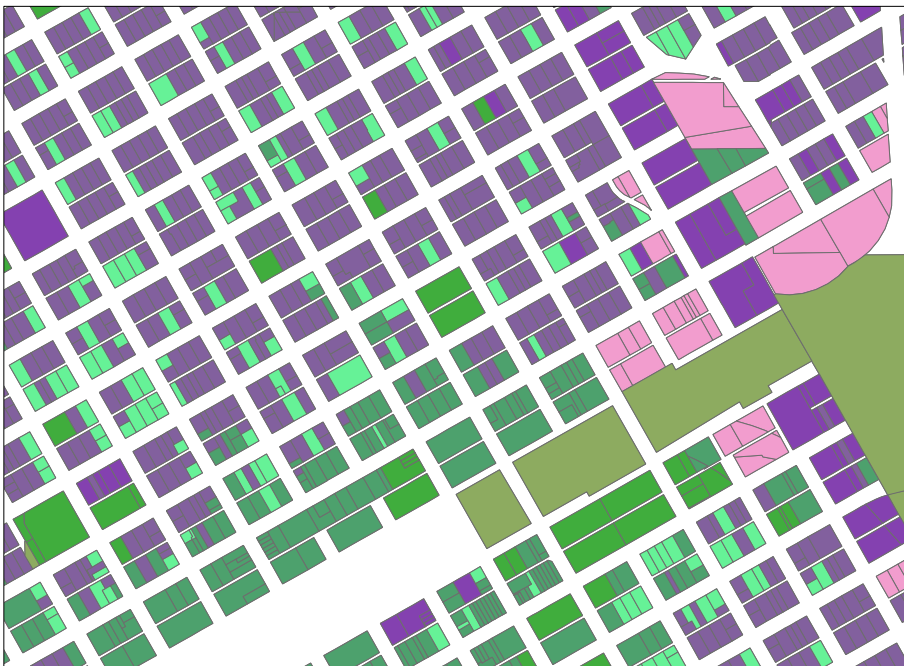


0 550 1,100 2,200 Feet

## SITE AND INFRASTRUCTURE CRITERIA

- Water\_Hydrants
- Storm\_Intake
- Sanitary\_Manhole
- Water\_Pipes
- Storm\_Pipe
- Sanitary\_Pipe
- Storm\_Channel
- Parcels

Site F2



0 550 1,100 2,200 Feet

### Existing Land Use

- <all other values>
- EX\_ACR
- EX\_AG COMM
- EX\_AGStore
- EX\_Agriculture
- EX\_Cemetery
- EX\_Church
- EX\_DTCCOFF
- EX\_Fm
- EX\_HC
- EX\_ITC
- EX\_LI
- EX\_MobileHomes
- EX\_MultiFamily1
- EX\_PR
- EX\_PUBBuild
- EX\_PUBSchool
- EX\_SingleFamily
- EX\_VacantCorp
- PAR-LIN

02.25.05

## Site Master Plan Concepts

Based on the Fire and EMS Location Study, Preliminary Site Master Plan Concepts were developed for sites A1, A2, B, C, E, F1, F2, and G. Included with each option is an overview of Fire Station Criteria and discussion points of each preliminary option. These preliminary options, with discussion points, form the basis of the Preliminary Option

## SITE MASTER PLAN CONCEPTS

A1



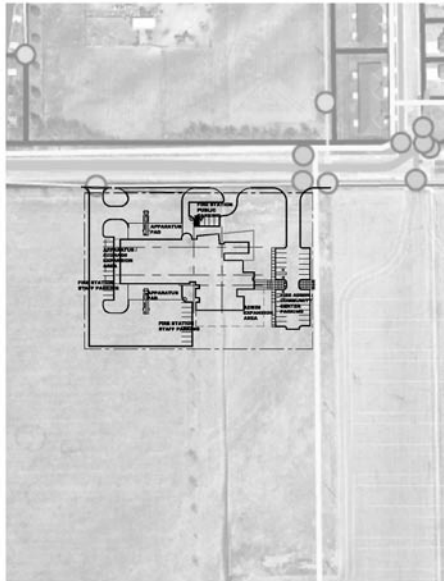
A2



B



C



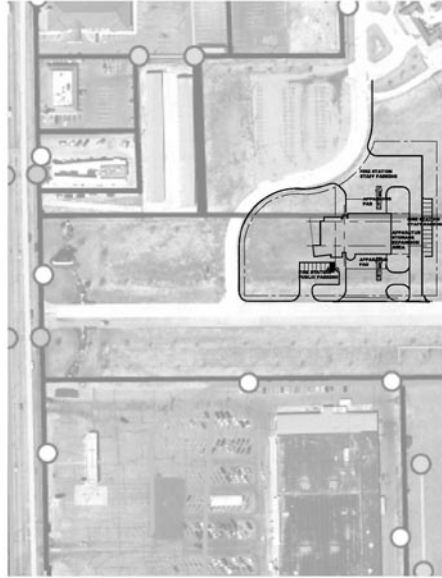


## SITE MASTER PLAN CONCEPTS

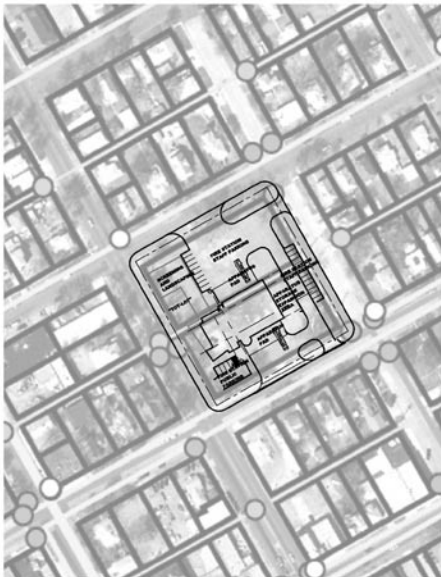
**E**



**F1**



**F2**



**G**



Site D – Preliminary site plan not considered since site is unfeasible for response time coverage and cost.



## Preliminary Site Master Plan Ranking

Based on the Preliminary Site Master Plan Concepts and discussion points the following represents the assessment of the seven sites master planned. Following site assessment, Sites F, A1, and A2 are the preferred sites, while sites B, C, E, and G are not feasible or appropriate for further consideration due to emergency response times and impact on operations of the Fire Department.

## PRELIMI- NARY SITE MASTER PLAN RANKING

OWNER: City of Grand Island  
PROJ: Grand Island Fire Station  
LOC.: Grand Island, Nebraska  
TITLE: PRELIMINARY CONCEPTUAL ESTIMATE

DATE: 03-Feb-05  
REV#:  
PROJ#: 1637  
FILE#:

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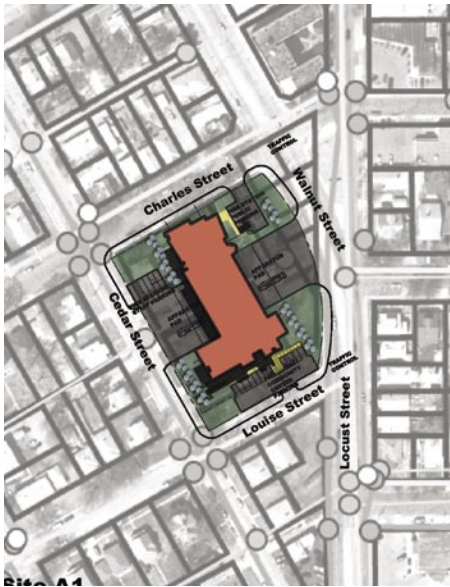
Preliminary Fire Station Site Ranking Consensus							
	Site A	Site A2	Site B	Site C	Site E	Site F	Site G
Access to Site	2	1	6	6	4	3	5
Response from Site	2	2	3	4	7	1	6
Anticipation of Future Fire Needs	2	2	3	4	7	1	6
Site Configuration / Flexibility	5	4	6	2	1	3	7
Expansion Potential	5	4	7	3	2	1	6
Compatibility With Surroundings	6	4	5	3	1	2	7
Support of Economic Development	4	1	2	6	5	3	7
Relationship to Other Municipal Facilities	4	2	1	7	3	5	6
Land Acquisition / Development Costs	7	6	5	2	3	4	1
Overall Project Costs	7	5	4	2	3	6	1
Anticipated Willingness of Seller	7	6	5	2	3	1	6
Totals (lower score = Higher preference)	51	37	47	41	39	30	58
Rank	6	2	5	4	3	1	7

## Final Site Master Planning

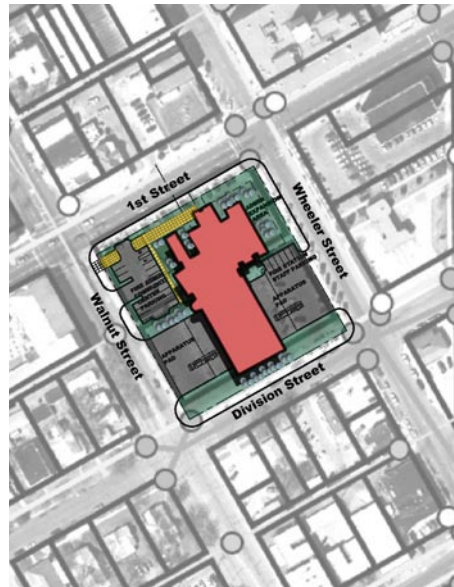
Based on the Preliminary Site Master Plan Concepts and site ranking, Sites F, A1, and A2 are the preferred sites, with Site F (including site F1 and F2) being the recommended sites/strategy. The Master Plan options which follow are preliminary, and as a Master Plan are intended to assess site configurations, more detailed planning should occur to determine optimum building configurations, site access points, and circulation. The Master Plans provided should be considered a flexible guide for future development of design concepts.

## FINAL SITE MASTER PLANNING

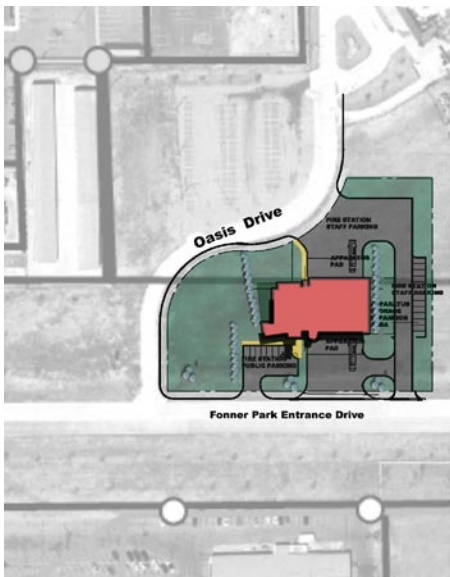
A1



A2



F1



F2



02.25.05

OWNER: City of Grand Island  
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## OPINION OF PROBABLE CONSTRUC- TION COSTS

Option Comparisons		
<b>OPTION A1</b>	<b>TOTAL PROJECT COSTS</b>	<b>\$4,978,530</b>
LAND ACQUISITION / DEVELOPMENT COSTS	\$1,147,500	
CONSTRUCITON COSTS	\$2,995,710	
SOFT COSTS / CONTINGENCIES	\$835,320	
<b>OPTION A2</b>	<b>TOTAL PROJECT COSTS</b>	<b>\$4,463,904</b>
LAND ACQUISITION / DEVELOPMENT COSTS	\$696,000	
CONSTRUCITON COSTS	\$3,034,210	
SOFT COSTS / CONTINGENCIES	\$733,694	
<b>OPTION B</b>	<b>TOTAL PROJECT COSTS</b>	<b>\$4,433,324</b>
LAND ACQUISITION / DEVELOPMENT COSTS	\$670,500	
CONSTRUCITON COSTS	\$3,023,710	
SOFT COSTS / CONTINGENCIES	\$739,114	
<b>OPTION C</b>	<b>TOTAL PROJECT COSTS</b>	<b>\$4,039,153</b>
LAND ACQUISITION / DEVELOPMENT COSTS	\$336,000	
CONSTRUCITON COSTS	\$2,944,210	
SOFT COSTS / CONTINGENCIES	\$758,943	
<b>OPTION E</b>	<b>TOTAL PROJECT COSTS</b>	<b>\$4,195,317</b>
LAND ACQUISITION / DEVELOPMENT COSTS	\$471,250	
CONSTRUCITON COSTS	\$2,949,460	
SOFT COSTS / CONTINGENCIES	\$774,607	
<b>OPTION F (F1 AND F2)</b>	<b>TOTAL PROJECT COSTS</b>	<b>\$4,941,829</b>
LAND ACQUISITION / DEVELOPMENT COSTS	\$576,000	
CONSTRUCITON COSTS	\$3,467,760	
SOFT COSTS / CONTINGENCIES	\$898,069	
<b>OPTION G</b>	<b>TOTAL PROJECT COSTS</b>	<b>\$3,917,285</b>
LAND ACQUISITION / DEVELOPMENT COSTS	\$240,000	
CONSTRUCITON COSTS	\$2,848,210	
SOFT COSTS / CONTINGENCIES	\$829,075	

Financing costs should be verified by Bond consultant. Data/Telephone costs are allowance only - County would be responsible for data and telephone cabling costs separately from Building construction bids. All amounts are based on December 2004 dollar

02.25.05

# GRAND ISLAND FIRE DEPARTMENT SITE AND NEEDS STUDY

## Fire Station

OWNER: City of Grand Island  
 PROJ: Grand Island Fire Station  
 LOC.: Grand Island, Nebraska  
 TITLE: PRELIMINARY CONCEPTUAL ESTIMATE

DATE: 03-Feb-05  
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**BKV**  
 GROUP

## OPINION OF PROBABLE CONSTRUCTION COSTS

Site Option A - With Concept Plan 1		NEW SQ FT HQ STATION	23,711		
		NEW SQ FT BUILDING 2	0		
		TOTAL NEW SF	23,711		
		AREA TO REMAIN	-		
Acres: 2		TOTAL SQ FT	23,711		
Cost Per Acre 150000					
DESCRIPTION	COST/ BUILDING	BUILDING SF	COST SF	SUB TOTAL	PERCENT TOTAL
ADMINISTRATION		23,711	\$32.41	\$768,500	15.44%
LAND ACQUISITION	\$760,000				15.27%
LEGAL, FISCAL & ADMINISTRATIVE	\$0				0.00%
SOIL BORINGS	\$5,000				0.10%
SURVEY	\$3,500				0.07%
CONSTRUCTION COSTS		23,711	\$126.34	\$2,995,710	60.17%
SITEWORK - DEMO	\$40,000				0.80%
SITEWORK - UTILITIES RELOCATION	\$19,500				0.39%
SITEWORK - PAVEMENT / LANDSCAPING	\$200,000				4.02%
BUILDING DEMOLITION	\$128,000				2.57%
BUILDING CONSTRUCTION - RENOVATION	\$0				0.00%
BUILDING CONSTRUCTION - NEW	\$2,608,210				52.39%
ABATEMENT ALLOWANCE	\$0				0.00%
FEES		23,711	\$14.99	\$355,325	7.14%
A/E DESIGN AND BIDDING FEES	\$259,091				5.20%
CIVIL ENGINEERING	\$6,500				0.13%
LANDSCAPE ARCHITECT	\$5,200				0.10%
REIMBURSABLE EXPENSES	\$19,432				0.39%
PLAN REVIEW FEES & PERMITS	\$30,481				0.61%
SPECIAL INSPECTIONS AND TESTING	\$7,620				0.15%
CITY SAC/WAC (PRELIM ALLOWANCE)	\$27,000				0.54%
FURNISHINGS, FIXTURES & EQUIPMENT (FF&E)		23,711	\$6.63	\$157,199	3.16%
OFFICE FURNITURE ALLOWANCE	\$118,555				2.38%
KITCHEN EQUIPMENT ALLOWANCE	\$15,000				0.30%
LAUNDRY EQUIPMENT ALLOWANCE	\$12,000				0.24%
FF&E DESIGN FEES	\$11,644				0.23%
TECHNOLOGY		23,711	\$2.21	\$52,422	1.05%
DATA / TELEPHONE ALLOWANCE	\$5,000				0.10%
SECURITY / VIDEO SYSTEMS	\$47,422				0.95%
CONTINGENCY		23,711	\$27.39	\$649,373	13.04%
ESTIMATING (5%)	\$216,458				4.35%
PROJECT (10%)	\$432,916				8.70%
FINANCING		23,711	\$0.00	\$0	0.00%
BOND ISSUANCE COSTS	\$0				0.00%
INVESTMENT EARNINGS	\$0				0.00%
TOTAL		23,711	\$209.97	\$4,978,530	100.00%

Financing costs should be verified by Bond consultant. Data/Telephone costs are allowance only - County would be responsible for data and telephone cabling costs separately from Building construction bids. All amounts are based on December 2004 dollars and are subject to inflation and market variations.

02.25.05



# GRAND ISLAND FIRE DEPARTMENT SITE AND NEEDS STUDY

## Fire Station

OWNER: City of Grand Island  
 PROJ: Grand Island Fire Station  
 LOC.: Grand Island, Nebraska  
 TITLE: PRELIMINARY CONCEPTUAL ESTIMATE

DATE: 03-Feb-05  
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**BKV**  
 GROUP

## OPINION OF PROBABLE CONSTRUCTION COSTS

Site Option A2 - With Concept Plan 2		NEW SQ FT HQ STATION	23,711		
		NEW SQ FT BUILDING 2	0		
		TOTAL NEW SF	23,711		
		AREA TO REMAIN	-		
Acres: 1.8		TOTAL SQ FT	23,711		
Cost Per Acre 150000					
DESCRIPTION	COST/ BUILDING	BUILDING SF	COST SF	SUB TOTAL	PERCENT TOTAL
ADMINISTRATION		23,711	\$11.75	\$278,500	6.24%
LAND ACQUISITION (REPLACEMENT PARKING)	\$270,000				6.05%
LEGAL, FISCAL & ADMINISTRATIVE	\$0				0.00%
SOIL BORINGS	\$5,000				0.11%
SURVEY	\$3,500				0.08%
CONSTRUCTION COSTS		23,711	\$127.97	\$3,034,210	67.97%
SITEWORK - DEMO	\$36,000				0.81%
SITEWORK - UTILITIES RELOCATION	\$0				0.00%
SITEWORK - PAVEMENT / LANDSCAPING	\$180,000				4.03%
REPLACEMNET PARKING	\$210,000				4.70%
BUILDING DEMOLITION	\$0				0.00%
BUILDING CONSTRUCTION - RENOVATION	\$0				0.00%
BUILDING CONSTRUCTION - NEW	\$2,608,210				58.43%
ABATEMENT ALLOWANCE	\$0				0.00%
FEES		23,711	\$15.15	\$359,324	8.05%
A/E DESIGN AND BIDDING FEES	\$262,364				5.88%
CIVIL ENGINEERING	\$6,500				0.15%
LANDSCAPE ARCHITECT	\$5,200				0.12%
REIMBURSABLE EXPENSES	\$19,677				0.44%
PLAN REVIEW FEES & PERMITS	\$30,866				0.69%
SPECIAL INSPECTIONS AND TESTING	\$7,717				0.17%
CITY SAC/WAC (PRELIM ALLOWANCE)	\$27,000				0.60%
FURNISHINGS, FIXTURES & EQUIPMENT (FF&E)		23,711	\$6.63	\$157,199	3.52%
OFFICE FURNITURE ALLOWANCE	\$118,555				2.66%
KITCHEN EQUIPMENT ALLOWANCE	\$15,000				0.34%
LAUNDRY EQUIPMENT ALLOWANCE	\$12,000				0.27%
FF&E DESIGN FEES	\$11,644				0.26%
TECHNOLOGY		23,711	\$2.21	\$52,422	1.17%
DATA / TELEPHONE ALLOWANCE	\$5,000				0.11%
SECURITY / VIDEO SYSTEMS	\$47,422				1.06%
CONTINGENCY		23,711	\$24.56	\$582,248	13.04%
ESTIMATING (5%)	\$194,083				4.35%
PROJECT (10%)	\$388,166				8.70%
FINANCING		23,711	\$0.00	\$0	0.00%
BOND ISSUANCE COSTS	\$0				0.00%
INVESTMENT EARNINGS	\$0				0.00%
TOTAL		23,711	\$188.26	\$4,463,904	100.00%

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02.25.05



# GRAND ISLAND FIRE DEPARTMENT SITE AND NEEDS STUDY

## Fire Station

OWNER: City of Grand Island  
 PROJ: Grand Island Fire Station  
 LOC.: Grand Island, Nebraska  
 TITLE: PRELIMINARY CONCEPTUAL ESTIMATE

DATE: 03-Feb-05  
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**BKV**  
 GROUP

## OPINION OF PROBABLE CONSTRUCTION COSTS

<b>Site Option B - With Concept Plan 2</b>		NEW SQ FT HQ STATION	23,711		
		NEW SQ FT BUILDING 2	0		
		TOTAL NEW SF	23,711		
		AREA TO REMAIN	-		
Acres: 1.7		TOTAL SQ FT	23,711		
Cost Per Acre 150000					
DESCRIPTION	COST/ BUILDING	BUILDING SF	COST SF	SUB TOTAL	PERCENT TOTAL
<b>ADMINISTRATION</b>		23,711	\$11.11	\$263,500	5.94%
LAND ACQUISITION	\$255,000				5.75%
LEGAL, FISCAL & ADMINISTRATIVE	\$0				0.00%
SOIL BORINGS	\$5,000				0.11%
SURVEY	\$3,500				0.08%
<b>CONSTRUCTION COSTS</b>		23,711	\$127.52	\$3,023,710	68.20%
SITEWORK - DEMO	\$34,000				0.77%
SITEWORK - UTILITIES RELOCATION	\$19,500				0.44%
SITEWORK - PAVEMENT / LANDSCAPING	\$170,000				3.83%
BUILDING DEMOLITION	\$192,000				4.33%
BUILDING CONSTRUCTION - RENOVATION	\$0				0.00%
BUILDING CONSTRUCTION - NEW	\$2,608,210				58.83%
ABATEMENT ALLOWANCE	\$0				0.00%
<b>FEES</b>		23,711	\$15.11	\$358,233	8.08%
A/E DESIGN AND BIDDING FEES	\$261,471				5.90%
CIVIL ENGINEERING	\$6,500				0.15%
LANDSCAPE ARCHITECT	\$5,200				0.12%
REIMBURSABLE EXPENSES	\$19,610				0.44%
PLAN REVIEW FEES & PERMITS	\$30,761				0.69%
SPECIAL INSPECTIONS AND TESTING	\$7,690				0.17%
CITY SAC/WAC (PRELIM ALLOWANCE)	\$27,000				0.61%
<b>FURNISHINGS, FIXTURES &amp; EQUIPMENT (FF&amp;E)</b>		23,711	\$6.63	\$157,199	3.55%
OFFICE FURNITURE ALLOWANCE	\$118,555				2.67%
KITCHEN EQUIPMENT ALLOWANCE	\$15,000				0.34%
LAUNDRY EQUIPMENT ALLOWANCE	\$12,000				0.27%
FF&E DESIGN FEES	\$11,644				0.26%
<b>TECHNOLOGY</b>		23,711	\$2.21	\$52,422	1.18%
DATA / TELEPHONE ALLOWANCE	\$5,000				0.11%
SECURITY / VIDEO SYSTEMS	\$47,422				1.07%
<b>CONTINGENCY</b>		23,711	\$24.39	\$578,260	13.04%
ESTIMATING (5%)	\$192,753				4.35%
PROJECT (10%)	\$385,506				8.70%
<b>FINANCING</b>		23,711	\$0.00	\$0	0.00%
BOND ISSUANCE COSTS	\$0				0.00%
INVESTMENT EARNINGS	\$0				0.00%
<b>TOTAL</b>		23,711	\$186.97	\$4,433,324	100.00%

Financing costs should be verified by Bond consultant. Data/Telephone costs are allowance only - County would be responsible for data and telephone cabling costs separately from Building construction bids. All amounts are based on December 2004 dollar

02.25.05





# GRAND ISLAND FIRE DEPARTMENT SITE AND NEEDS STUDY

## Fire Station

OWNER: City of Grand Island  
 PROJ: Grand Island Fire Station  
 LOC.: Grand Island, Nebraska  
 TITLE: PRELIMINARY CONCEPTUAL ESTIMATE

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**BKV**  
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## OPINION OF PROBABLE CONSTRUCTION COSTS

Site Option C - With Concept Plan 2		NEW SQ FT HQ STATION	23,711		
		NEW SQ FT BUILDING 2	0		
		TOTAL NEW SF	23,711		
		AREA TO REMAIN	-		
Acres: 2.8		TOTAL SQ FT	23,711		
Cost Per Acre 150000					
DESCRIPTION	COST/ BUILDING	BUILDING SF	COST SF	SUB TOTAL	PERCENT TOTAL
ADMINISTRATION		23,711	\$0.36	\$8,500	0.21%
LAND ACQUISITION	\$0				0.00%
LEGAL, FISCAL & ADMINISTRATIVE	\$0				0.00%
SOIL BORINGS	\$5,000				0.12%
SURVEY	\$3,500				0.09%
CONSTRUCTION COSTS		23,711	\$124.17	\$2,944,210	72.89%
SITEWORK - DEMO	\$56,000				1.39%
SITEWORK - UTILITIES RELOCATION	\$0				0.00%
SITEWORK - PAVEMENT / LANDSCAPING	\$280,000				6.93%
BUILDING DEMOLITION	\$0				0.00%
BUILDING CONSTRUCTION - RENOVATION	\$0				0.00%
BUILDING CONSTRUCTION - NEW	\$2,608,210				64.57%
ABATEMENT ALLOWANCE	\$0				0.00%
FEES		23,711	\$14.76	\$349,975	8.66%
A/E DESIGN AND BIDDING FEES	\$254,714				6.31%
CIVIL ENGINEERING	\$6,500				0.16%
LANDSCAPE ARCHITECT	\$5,200				0.13%
REIMBURSABLE EXPENSES	\$19,104				0.47%
PLAN REVIEW FEES & PERMITS	\$29,966				0.74%
SPECIAL INSPECTIONS AND TESTING	\$7,492				0.19%
CITY SAC/WAC (PRELIM ALLOWANCE)	\$27,000				0.67%
FURNISHINGS, FIXTURES & EQUIPMENT (FF&E)		23,711	\$6.63	\$157,199	3.89%
OFFICE FURNITURE ALLOWANCE	\$118,555				2.94%
KITCHEN EQUIPMENT ALLOWANCE	\$15,000				0.37%
LAUNDRY EQUIPMENT ALLOWANCE	\$12,000				0.30%
FF&E DESIGN FEES	\$11,644				0.29%
TECHNOLOGY		23,711	\$2.21	\$52,422	1.30%
DATA / TELEPHONE ALLOWANCE	\$5,000				0.12%
SECURITY / VIDEO SYSTEMS	\$47,422				1.17%
CONTINGENCY		23,711	\$22.22	\$526,846	13.04%
ESTIMATING (5%)	\$175,615				4.35%
PROJECT (10%)	\$351,231				8.70%
FINANCING		23,711	\$0.00	\$0	0.00%
BOND ISSUANCE COSTS	\$0				0.00%
INVESTMENT EARNINGS	\$0				0.00%
TOTAL		23,711	\$170.35	\$4,039,153	100.00%

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02.25.05



# GRAND ISLAND FIRE DEPARTMENT SITE AND NEEDS STUDY

## Fire Station

OWNER: City of Grand Island  
 PROJ: Grand Island Fire Station  
 LOC.: Grand Island, Nebraska  
 TITLE: PRELIMINARY CONCEPTUAL ESTIMATE

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## OPINION OF PROBABLE CONSTRUCTION COSTS

<b>Site Option E - With Concept Plan 2</b>		NEW SQ FT HQ STATION	23,711		
		NEW SQ FT BUILDING 2	0		
		TOTAL NEW SF	23,711		
		AREA TO REMAIN	-		
Acres: 3.25		TOTAL SQ FT	23,711		
Cost Per Acre 40000					
DESCRIPTION	COST/ BUILDING	BUILDING SF	COST SF	SUB TOTAL	PERCENT TOTAL
<b>ADMINISTRATION</b>		23,711	\$5.84	\$138,500	3.30%
LAND ACQUISITION	\$130,000				3.10%
LEGAL, FISCAL & ADMINISTRATIVE	\$0				0.00%
SOIL BORINGS	\$5,000				0.12%
SURVEY	\$3,500				0.08%
<b>CONSTRUCTION COSTS</b>		23,711	\$124.39	\$2,949,460	70.30%
SITEWORK - DEMO	\$16,250				0.39%
SITEWORK - UTILITIES RELOCATION	\$0				0.00%
SITEWORK - PAVEMENT / LANDSCAPING	\$325,000				7.75%
BUILDING DEMOLITION	\$0				0.00%
BUILDING CONSTRUCTION - RENOVATION	\$0				0.00%
BUILDING CONSTRUCTION - NEW	\$2,608,210				62.17%
ABATEMENT ALLOWANCE	\$0				0.00%
<b>FEES</b>		23,711	\$14.78	\$350,520	8.36%
A/E DESIGN AND BIDDING FEES	\$255,160				6.08%
CIVIL ENGINEERING	\$6,500				0.15%
LANDSCAPE ARCHITECT	\$5,200				0.12%
REIMBURSABLE EXPENSES	\$19,137				0.46%
PLAN REVIEW FEES & PERMITS	\$30,019				0.72%
SPECIAL INSPECTIONS AND TESTING	\$7,505				0.18%
CITY SAC/WAC (PRELIM ALLOWANCE)	\$27,000				0.64%
<b>FURNISHINGS, FIXTURES &amp; EQUIPMENT (FF&amp;E)</b>		23,711	\$6.63	\$157,199	3.75%
OFFICE FURNITURE ALLOWANCE	\$118,555				2.83%
KITCHEN EQUIPMENT ALLOWANCE	\$15,000				0.36%
LAUNDRY EQUIPMENT ALLOWANCE	\$12,000				0.29%
FF&E DESIGN FEES	\$11,644				0.28%
<b>TECHNOLOGY</b>		23,711	\$2.21	\$52,422	1.25%
DATA / TELEPHONE ALLOWANCE	\$5,000				0.12%
SECURITY / VIDEO SYSTEMS	\$47,422				1.13%
<b>CONTINGENCY</b>		23,711	\$23.08	\$547,215	13.04%
ESTIMATING (5%)	\$182,405				4.35%
PROJECT (10%)	\$364,810				8.70%
<b>FINANCING</b>		23,711	\$0.00	\$0	0.00%
BOND ISSUANCE COSTS	\$0				0.00%
INVESTMENT EARNINGS	\$0				0.00%
<b>TOTAL</b>		23,711	\$176.94	\$4,195,317	100.00%

Financing costs should be verified by Bond consultant. Data/Telephone costs are allowance only - County would be responsible for data and telephone cabling costs separately from Building construction bids. All amounts are based on December 2004 dollar

02.25.05



# GRAND ISLAND FIRE DEPARTMENT SITE AND NEEDS STUDY

## Fire Station

OWNER: City of Grand Island  
 PROJ: Grand Island Fire Station  
 LOC.: Grand Island, Nebraska  
 TITLE: PRELIMINARY CONCEPTUAL ESTIMATE

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## OPINION OF PROBABLE CONSTRUCTION COSTS

<b>Blended Site Option</b>		NEW SQ FT HQ STATION		24,098	
<b>Site F1 and F2 - 3 Bay Stations with Plan Option 4</b>		NEW SQ FT BUILDING 2		0	
		TOTAL NEW SF		24,098	
		AREA TO REMAIN		-	
Acres: 4.8		TOTAL SQ FT		24,098	
Cost Per Acre 40000					
DESCRIPTION	COST/ BUILDING	BUILDING SF	COST SF	SUB TOTAL	PERCENT TOTAL
<b>ADMINISTRATION</b>		24,098	\$0.91	\$22,000	0.45%
LAND ACQUISITION	\$0				0.00%
LEGAL, FISCAL & ADMINISTRATIVE	\$0				0.00%
SOIL BORINGS	\$15,000				0.30%
SURVEY	\$7,000				0.14%
<b>CONSTRUCTION COSTS</b>		24,098	\$143.90	\$3,467,760	70.17%
SITEWORK - DEMO	\$96,000				1.94%
SITEWORK - UTILITIES RELOCATION	\$0				0.00%
SITEWORK - PAVEMENT / LANDSCAPING	\$480,000				9.71%
BUILDING DEMOLITION	\$0				0.00%
BUILDING CONSTRUCTION - RENOVATION	\$0				0.00%
BUILDING CONSTRUCTION - NEW	\$2,891,760				58.52%
ABATEMENT ALLOWANCE	\$0				0.00%
<b>FEES</b>		24,098	\$20.25	\$487,875	9.87%
A/E DESIGN AND BIDDING FEES	\$337,255				6.82%
CIVIL ENGINEERING	\$13,000				0.26%
LANDSCAPE ARCHITECT	\$10,400				0.21%
REIMBURSABLE EXPENSES	\$25,294				0.51%
PLAN REVIEW FEES & PERMITS	\$35,501				0.72%
SPECIAL INSPECTIONS AND TESTING	\$12,425				0.25%
CITY SAC/WAC (PRELIM ALLOWANCE)	\$54,000				1.09%
<b>FURNISHINGS, FIXTURES &amp; EQUIPMENT (FF&amp;E)</b>		24,098	\$9.85	\$237,314	4.80%
OFFICE FURNITURE ALLOWANCE	\$180,735				3.66%
KITCHEN EQUIPMENT ALLOWANCE	\$15,000				0.30%
LAUNDRY EQUIPMENT ALLOWANCE	\$24,000				0.49%
FF&E DESIGN FEES	\$17,579				0.36%
<b>TECHNOLOGY</b>		24,098	\$3.41	\$82,294	1.67%
DATA / TELEPHONE ALLOWANCE	\$10,000				0.20%
SECURITY / VIDEO SYSTEMS	\$72,294				1.46%
<b>CONTINGENCY</b>		24,098	\$26.75	\$644,586	13.04%
ESTIMATING (5%)	\$214,862				4.35%
PROJECT (10%)	\$429,724				8.70%
<b>FINANCING</b>		24,098	\$0.00	\$0	0.00%
BOND ISSUANCE COSTS	\$0				0.00%
INVESTMENT EARNINGS	\$0				0.00%
<b>TOTAL</b>		24,098	\$205.07	\$4,941,829	100.00%

Financing costs should be verified by Bond consultant. Data/Telephone costs are allowance only - County would be responsible for data and telephone cabling costs separately from Building construction bids. All amounts are based on December 2004 dollar

02.25.05



# GRAND ISLAND FIRE DEPARTMENT SITE AND NEEDS STUDY

## Fire Station

OWNER: City of Grand Island  
 PROJ: Grand Island Fire Station  
 LOC.: Grand Island, Nebraska  
 TITLE: PRELIMINARY CONCEPTUAL ESTIMATE

DATE: 03-Feb-05  
 REV#:   
 PROJ#: 1637  
 FILE#:

**BKV**  
 GROUP

## OPINION OF PROBABLE CONSTRUCTION COSTS

PRELIMINARY CONCEPT FOR ESTIMATE		NEW SQ FT HQ STATION		23,711	
Site Option G - With Concept Plan 1		NEW SQ FT BUILDING 2		0	
		TOTAL NEW SF		23,711	
		AREA TO REMAIN		-	
Acres: 2		TOTAL SQ FT		23,711	
Cost Per Acre 40000					
DESCRIPTION	COST/ BUILDING	BUILDING SF	COST SF	SUB TOTAL	PERCENT TOTAL
ADMINISTRATION		23,711	\$0.36	\$8,500	0.22%
LAND ACQUISITION	\$0				0.00%
LEGAL, FISCAL & ADMINISTRATIVE	\$0				0.00%
SOIL BORINGS	\$5,000				0.13%
SURVEY	\$3,500				0.09%
CONSTRUCTION COSTS		23,711	\$120.12	\$2,848,210	72.71%
SITEWORK - DEMO	\$40,000				1.02%
SITEWORK - UTILITIES RELOCATION	\$0				0.00%
SITEWORK - PAVEMENT / LANDSCAPING	\$200,000				5.11%
BUILDING DEMOLITION	\$0				0.00%
BUILDING CONSTRUCTION - RENOVATION	\$0				0.00%
BUILDING CONSTRUCTION - NEW	\$2,608,210				66.58%
ABATEMENT ALLOWANCE	\$0				0.00%
FEES		23,711	\$14.34	\$340,003	8.68%
A/E DESIGN AND BIDDING FEES	\$246,554				6.29%
CIVIL ENGINEERING	\$6,500				0.17%
LANDSCAPE ARCHITECT	\$5,200				0.13%
REIMBURSABLE EXPENSES	\$18,492				0.47%
PLAN REVIEW FEES & PERMITS	\$29,006				0.74%
SPECIAL INSPECTIONS AND TESTING	\$7,252				0.19%
CITY SAC/WAC (PRELIM ALLOWANCE)	\$27,000				0.69%
FURNISHINGS, FIXTURES & EQUIPMENT (FF&E)		23,711	\$6.63	\$157,199	4.01%
OFFICE FURNITURE ALLOWANCE	\$118,555				3.03%
KITCHEN EQUIPMENT ALLOWANCE	\$15,000				0.38%
LAUNDRY EQUIPMENT ALLOWANCE	\$12,000				0.31%
FF&E DESIGN FEES	\$11,644				0.30%
TECHNOLOGY		23,711	\$2.21	\$52,422	1.34%
DATA / TELEPHONE ALLOWANCE	\$5,000				0.13%
SECURITY / VIDEO SYSTEMS	\$47,422				1.21%
CONTINGENCY		23,711	\$21.55	\$510,950	13.04%
ESTIMATING (5%)	\$170,317				4.35%
PROJECT (10%)	\$340,633				8.70%
FINANCING		23,711	\$0.00	\$0	0.00%
BOND ISSUANCE COSTS	\$0				0.00%
INVESTMENT EARNINGS	\$0				0.00%
TOTAL		23,711	\$165.21	\$3,917,285	100.00%

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02.25.05



# GRAND ISLAND FIRE DEPARTMENT SITE AND NEEDS STUDY

## Fire Station

OWNER: City of Grand Island  
 PROJ: Grand Island Fire Station  
 LOC.: Grand Island, Nebraska  
 TITLE: PRELIMINARY CONCEPTUAL ESTIMATE

DATE: 03-Feb-05  
 REV#:   
 PROJ#: 1637  
 FILE#:

**BKV**  
 GROUP

## SITE MASTER PLAN CONCEPTS

<b>Site Option A - Without Admin</b>		NEW SQ FT HQ STATION		16,795	
<b>(5) Bay Station</b>		NEW SQ FT BUILDING 2		0	
		TOTAL NEW SF		16,795	
		AREA TO REMAIN		-	
Acres: 2		TOTAL SQ FT		16,795	
Cost Per Acre 150000					
DESCRIPTION	COST/ BUILDING	BUILDING SF	COST SF	SUB TOTAL	PERCENT TOTAL
<b>ADMINISTRATION</b>		16,795	\$60.05	\$1,008,500	22.71%
LAND ACQUISITION	\$1,000,000				22.52%
LEGAL, FISCAL & ADMINISTRATIVE	\$0				0.00%
SOIL BORINGS	\$5,000				0.11%
SURVEY	\$3,500				0.08%
<b>CONSTRUCTION COSTS</b>		16,795	\$143.07	\$2,402,900	54.10%
SITework - DEMO	\$40,000				0.90%
SITework - UTILITIES RELOCATION	\$19,500				0.44%
SITework - PAVEMENT / LANDSCAPING	\$200,000				4.50%
BUILDING DEMOLITION	\$128,000				2.88%
BUILDING CONSTRUCTION - RENOVATION	\$0				0.00%
BUILDING CONSTRUCTION - NEW	\$2,015,400				45.38%
ABATEMENT ALLOWANCE	\$0				0.00%
<b>FEES</b>		16,795	\$17.40	\$292,310	6.58%
A/E DESIGN AND BIDDING FEES	\$207,527				4.67%
CIVIL ENGINEERING	\$6,500				0.15%
LANDSCAPE ARCHITECT	\$5,200				0.12%
REIMBURSABLE EXPENSES	\$15,564				0.35%
PLAN REVIEW FEES & PERMITS	\$24,415				0.55%
SPECIAL INSPECTIONS AND TESTING	\$6,104				0.14%
CITY SAC/WAC (PRELIM ALLOWANCE)	\$27,000				0.61%
<b>FURNISHINGS, FIXTURES &amp; EQUIPMENT (FF&amp;E)</b>		16,795	\$7.14	\$119,853	2.70%
OFFICE FURNITURE ALLOWANCE	\$83,975				1.89%
KITCHEN EQUIPMENT ALLOWANCE	\$15,000				0.34%
LAUNDRY EQUIPMENT ALLOWANCE	\$12,000				0.27%
FF&E DESIGN FEES	\$8,878				0.20%
<b>TECHNOLOGY</b>		16,795	\$2.30	\$38,590	0.87%
DATA / TELEPHONE ALLOWANCE	\$5,000				0.11%
SECURITY / VIDEO SYSTEMS	\$33,590				0.76%
<b>CONTINGENCY</b>		16,795	\$34.49	\$579,323	13.04%
ESTIMATING (5%)	\$193,108				4.35%
PROJECT (10%)	\$386,215				8.70%
<b>FINANCING</b>		16,795	\$0.00	\$0	0.00%
BOND ISSUANCE COSTS	\$0				0.00%
INVESTMENT EARNINGS	\$0				0.00%
<b>TOTAL</b>		16,795	\$264.45	\$4,441,476	100.00%

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02.25.05





05



## Training Center

**Grand Island Fire Training Center Feasibility Study  
Education Building Summary****NEEDS  
ASSESSMENT  
PROGRAM**

17-Dec-04		Proposed Area Summary		
<b>Draft</b>				
Description		Quantity	Unit Area	Total
<b>Clean Areas</b>				
Classrooms	Capacity			
Presentation	50	1	2,000	2,000
Computer	20	1	900	900
Classroom	40	3	1,200	3,600
Classroom	15	0	1,900	-
Adjunct Instructor Storage		1	850	850
Breakout Rooms		0	800	-
Audio/Visual Storage		1	300	300
A/V Studio Room		1	400	400
A/V Production Room		1	250	250
Curriculum Storage		1	1,000	1,000
Vending		1	200	200
Lunch Room		0	16	-
Subtotal				9,500
Efficiency				65%
Total				14,615
<b>Office Spaces</b>				
<b>Shared</b>				
Waiting				
Receptionist		1	150	150
Visitor/Guest Instructor Cubes		1	48	48
Conference Room (6 person)		0	48	-
Archive File Storage		0	48	-
Central Copy and Storage		1	48	48
Library		10	48	480
Breakout Offices		10	48	480
Facility Coordinator		1	150	150
Facility Coordinator Secretary				
		30	10	300
		20	10	200
<b>Outside Users</b>				
Training Director		1	300	300
Instructors		1	330	330
Secretary		1	300	300
Personnel File Area (based on number of file cabinets)		6	150	900
Server Room		1	150	150
Communications Closet		1	100	100
<b>Grand Island Fire</b>				
Training Coordinator		1	150	150
Secretary		0	48	-
Drill Master - Fire		3	150	450
Drill Master - EMS		0	150	-
Personnel File Area (based on number of file cabinets)		0	150	-
Communications Closet		1	80	80
		1	80	80
Subtotal				
Efficiency				
Total		1	150	150
		0	48	-

## Training Center

**NEEDS  
ASSESSMENT  
PROGRAM**

<b>Wellness Area</b>	Fitness Equipment	0	48	-	
	Open Fitness	1	150	150	
	Multipurpose	1	150	150	
	Chair and Table Storage	1	150	150	
	Kitchen	1	80	80	
	Mens Locker Rooms	1	80	80	
	Womens Locker Rooms			-	
	Bunks			5,456	
	Linens			55%	
	Ice/Vending				9,920
	Student laundry				
	Lounge				
	Subtotal	1	1,280	1,280	
<b>Practical Areas</b>	Efficiency	1	7,000	7,000	
	Total	1	375	375	
		1	1,000	1,000	
		1	2,000	2,000	
		1	1,000	1,000	
				12,655	
				70%	
					18,079
		20	450	9,000	
		2	200	400	
		2	100	200	
		1	100	100	
<b>Misc. Spaces</b>		1	1,000	1,000	
				10,700	
				70%	
					15,286
		2	1,900	3,800	
		6	200	1,200	
		5	200	1,000	
		1	600	600	
		1	100	100	
		1	500	500	
		1	1,000	1,000	
		0	4,000	-	
<b>Grand Total</b>		1	600	600	
		1	6,480	6,480	
		1	16	16	
		1	200	200	
				-	
				15,496	
				70%	

**GRAND ISLAND TOTAL****84,323 SQ. FT.**

# GRAND ISLAND FIRE DEPARTMENT SITE AND NEEDS STUDY

## Training Center

### Grand Island Fire Training Center Feasibility Study Order of Magnitude of Site Development

12/15/2004

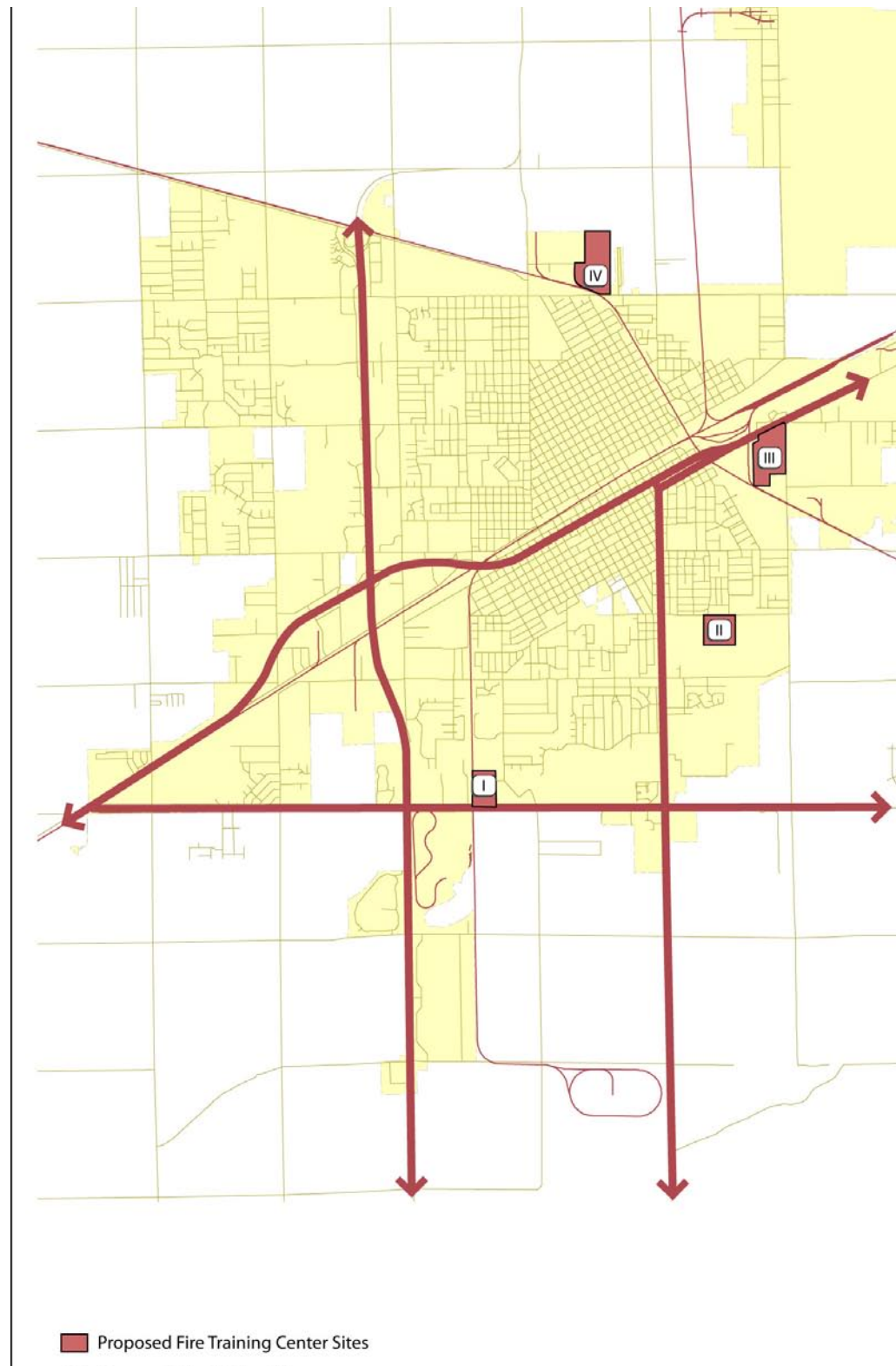
## NEEDS ASSESSMENT PROGRAM

### DETAILS

DESCRIPTION					QTY.	UNIT	UNIT COST	ITEM TOTAL	SUB-TOTAL
<b>Combined Education &amp; Training Bldg.</b>									
Building- New					84,323	SF	\$100.00	\$8,432,253	
Elevator					1	LS	\$60,000.00	\$60,000	
Stairway					4	EA	\$25,000.00	\$100,000	
Furniture, Fixtures & Equipment					84,323	SF	\$6.00	\$505,935	
									<b>\$10,917,825</b>
<b>Driver Training Facilities</b>									
<b>EVOC</b>									
Paving					27,000	SY	\$30.00	\$810,000	
Gravel safety perimeter- at curves & dead ends					0	SY	\$19.00	\$0	
Observation tower- allowance					1	EA	\$35,000.00	\$35,000	
Covered bleacher-allowance					1	EA	\$25,000.00	\$25,000	
Light Poles (175 foot staggered)					6	EA	\$4,000.00	\$24,000	(175 foot staggered)
Grade Crossing					1	EA	\$40,000.00	\$40,000	
Driver Control System					1	EA	\$30,000.00	\$30,000	
Traffic Light					1	EA	\$70,000.00	\$70,000	
Driving Simulator					2	EA	\$50,000.00	\$100,000	
Culvert allowance- 18"					0	LF	\$1,000.00	\$0	
									<b>\$1,360,800</b>
<b>Training Village</b>									
Cold Training Building					1	LS	\$1,855,000.00	\$1,855,000	
Live Fire Simulators	2	EA	\$275,000.00	\$550,000.00					
Standpipe and Stairs	5	EA	\$15,000.00	\$75,000.00					
Lining	600	SF	\$50.00	\$30,000.00					
Structure	12000	SF	\$100.00	\$1,200,000.00					
Live Fire Training Building					1	LS	\$1,105,000.00	\$1,105,000	
Live Fire Simulators	0	EA	\$275,000.00	\$0.00					
Standpipe and Stairs	3	EA	\$15,000.00	\$45,000.00					
Lining	5000	SF	\$80.00	\$400,000.00					
Structure	4400	SF	\$150.00	\$660,000.00					
Strip Commercial Training Building					1	LS	\$860,000.00	\$860,000	
Live Fire Simulators	0	EA	\$275,000.00	\$0.00					
Standpipe and Stairs	0	EA	\$15,000.00	\$0.00					
Lining	4000	SF	\$80.00	\$320,000.00					
Structure	3600	SF	\$150.00	\$540,000.00					
Residential Building					1	LS	\$430,000.00	\$430,000	
Live Fire Simulators	0	EA	\$275,000.00	\$0.00					
Standpipe and Stairs	0	EA	\$15,000.00	\$0.00					
Lining	2000	SF	\$80.00	\$160,000.00					
Structure	1800	SF	\$150.00	\$270,000.00					
Outdoor Pavilion Facility					0	SF	\$75.00	\$0	
Incline and Flat Roof on the Ground					1	EA	\$10,000.00	\$10,000	
Control/Refreshment/Restroom Building					0	SF	\$100.00	\$0	
Maintenance/Storage					16,000	SF	\$65.00	\$1,040,000	
Props Allowance					1	EA	\$20,000.00	\$20,000	
									<b>\$6,384,000</b>
<b>Fire Training Burn Pad</b>									
Flammable Liquids Simulator					1	EA	\$90,000.00	\$90,000	
Flange fire simulator					1	EA	\$40,000.00	\$40,000	
Fire tree simulator					1	EA	\$40,000.00	\$40,000	
Propane tank relief valve simulator					1	EA	\$40,000.00	\$40,000	
Aircraft SAFT Prop					0	EA	\$500,000.00	\$0	
Propane supply tank & control panel					1	EA	\$80,000.00	\$80,000	
Car Fire Simulator					1	SY	\$90,000.00	\$90,000	
									<b>\$456,000</b>
<b>Fire Training Features</b>									
Drafting Tank 35,000 gallon conc. tank w/ hood					1	LS	\$60,000.00	\$60,000	35,000 gallon conc. tank
Trench Simulator					1	LS	\$60,000.00	\$60,000	
Collapse Simulator					1	LS	\$300,000.00	\$300,000	
Urban Search and Rescue Pile					1	LS	\$30,000.00	\$30,000	
Vehicle Extrication Area 50x150					280	SY	\$30.00	\$8,400	
Confined Space Simulator					1	LS	\$50,000.00	\$50,000	
									<b>\$610,080</b>
<b>Simulated Haz-Mat Training Area</b>									
Donated Highway vehicle placement-allowance					1	EA	\$10,000.00	\$10,000	
Liquid leak simulation allowance (no fire)					1	EA	\$15,000.00	\$15,000	
HAZMAT Training Simulation Area					280	SY	\$19.00	\$5,320	Gravel Paving W/Fabric
Railroad track w/ ditches & ballast					300	LF	\$255.00	\$76,500	
Donated Railcar transport & placement-allowance					1	EA	\$20,000.00	\$20,000	
Liquid leak simulation allowance (no fire)					1	EA	\$15,000.00	\$15,000	
Rail Tank Car Fire Simulation					1	EA	\$60,000.00	\$60,000	
Graded Crossing					1	EA	\$20,000.00	\$20,000	
Gated Siding					1	EA	\$80,000.00	\$80,000	
									<b>\$362,184</b>
<b>Water Rescue Pond</b>									
Excavation					50,000	CY	\$2.25	\$112,500	
Excavation (wet soils)					0	CY	\$5.00	\$0	
Rubber Liner					90,000	SF	\$3.00	\$270,000	
Pumps					2	EA	\$50,000.00	\$100,000	
Pump House					1	EA	\$40,000.00	\$40,000	
24" PVC Pipe					5,000	LF	\$18.00	\$90,000	
Aerating Fountain					2	EA	\$20,000.00	\$40,000	
Concrete Pad and Vehicle on bottom					2	EA	\$10,000.00	\$20,000	
Boat ramp & Dock					1	EA	\$20,000.00	\$20,000	
Water Source Allowance					1	EA	\$25,000.00	\$25,000	
Settling Basin					6	EA	\$20,000.00	\$120,000	
									<b>\$1,005,000</b>
<b>Contingency</b>		<b>20.0%</b>							
<b>Total Modifier</b>		<b>120.000%</b>							
<b>TOTAL</b>									<b>\$21,095,889</b>

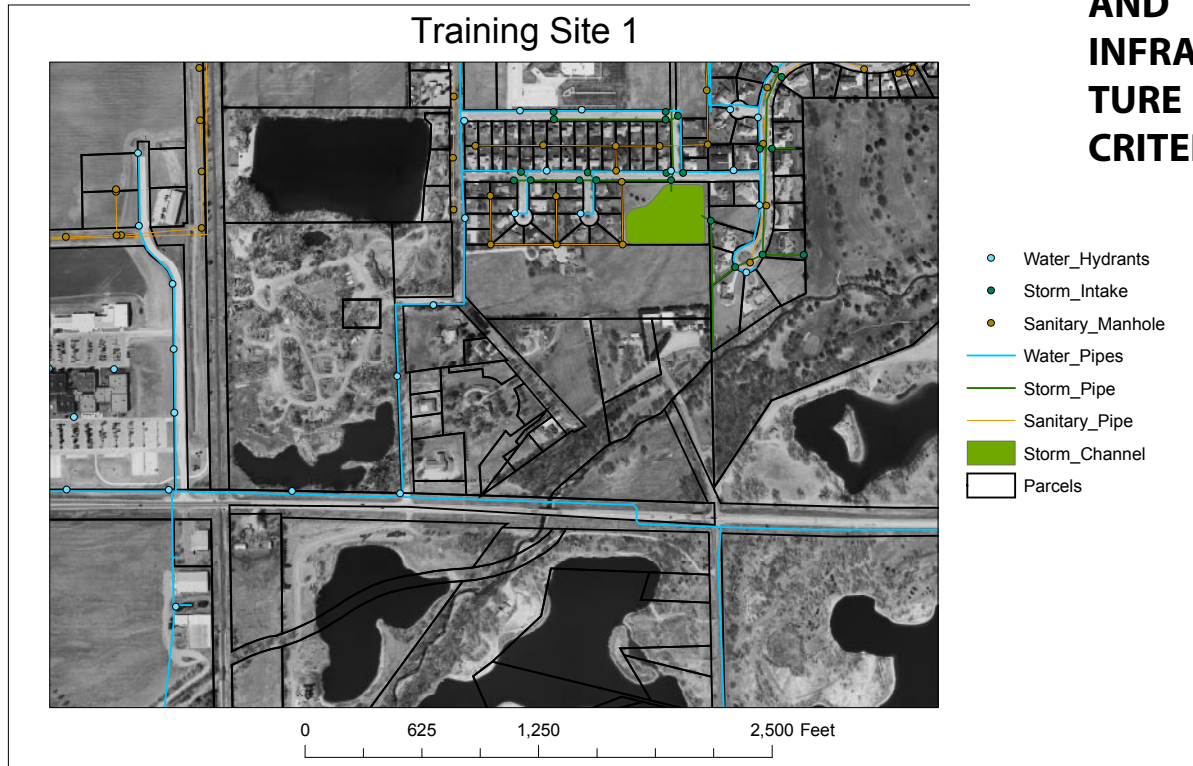
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## SITE IDENTIFICATION MAPPING

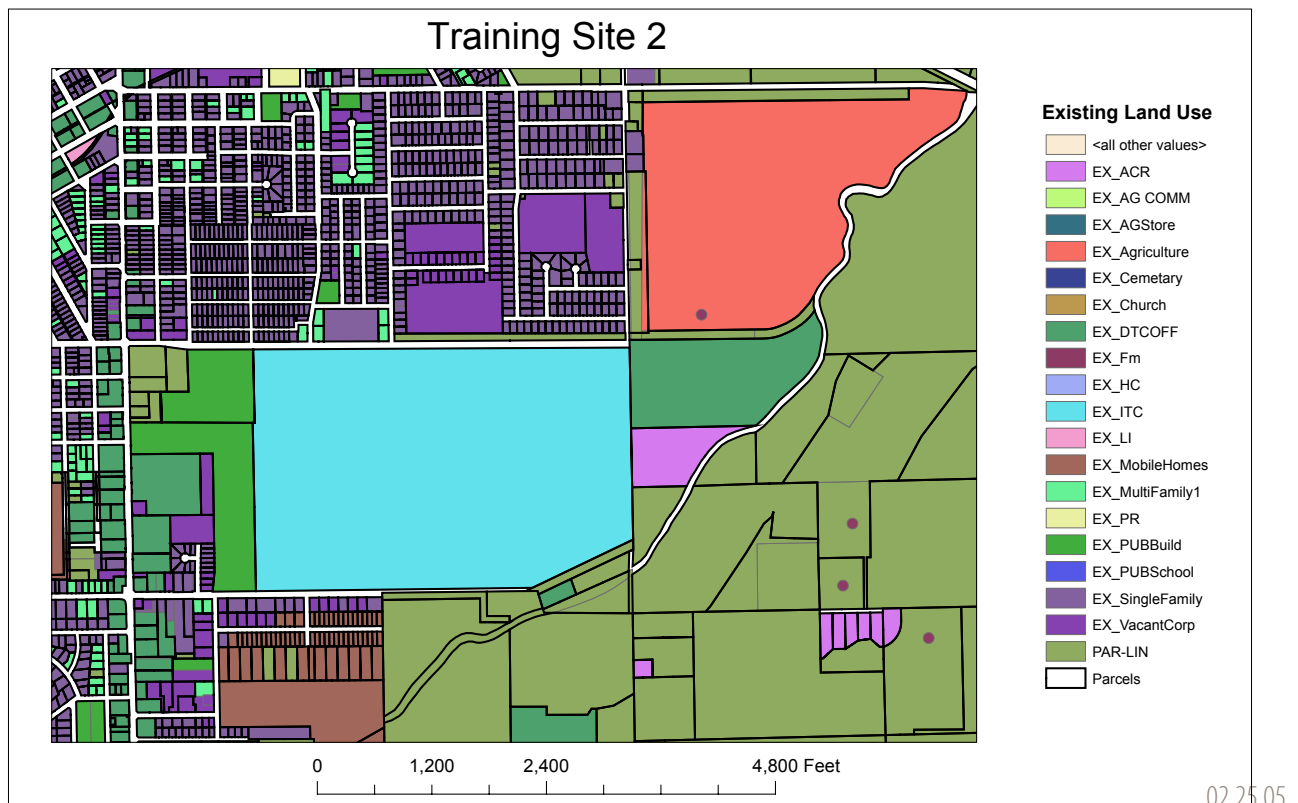


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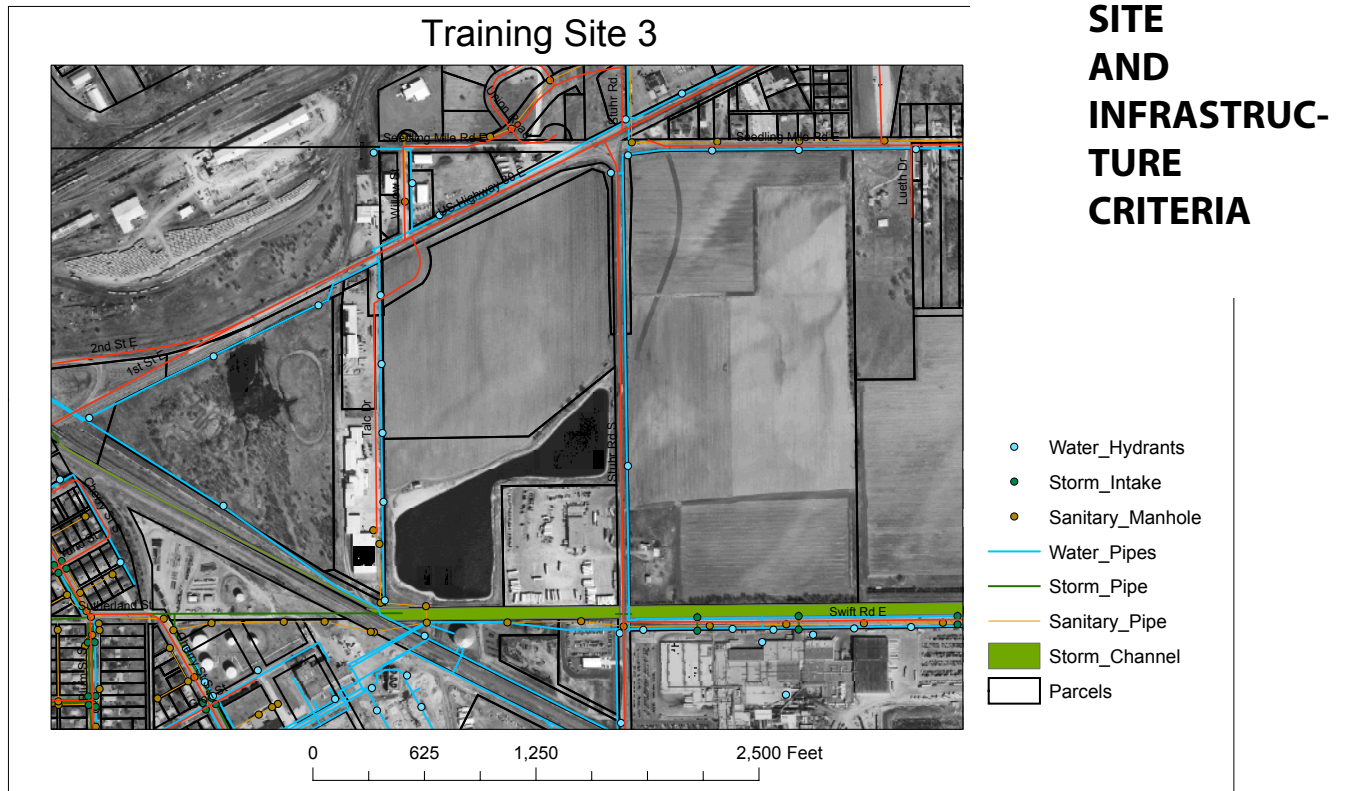
## SITE AND INFRASTRUCTURE CRITERIA



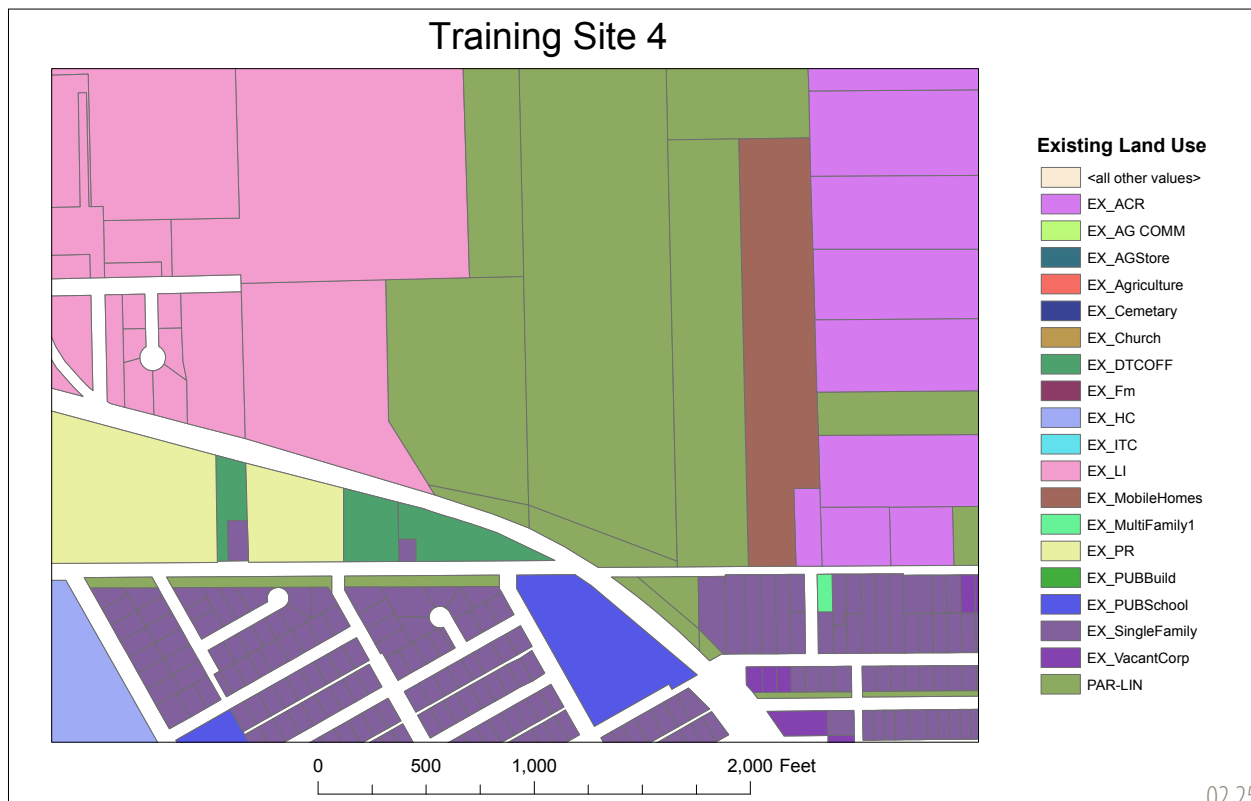
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**SITE  
MASTER  
PLAN  
CONCEPTS**



*Grand Island, Nebraska*

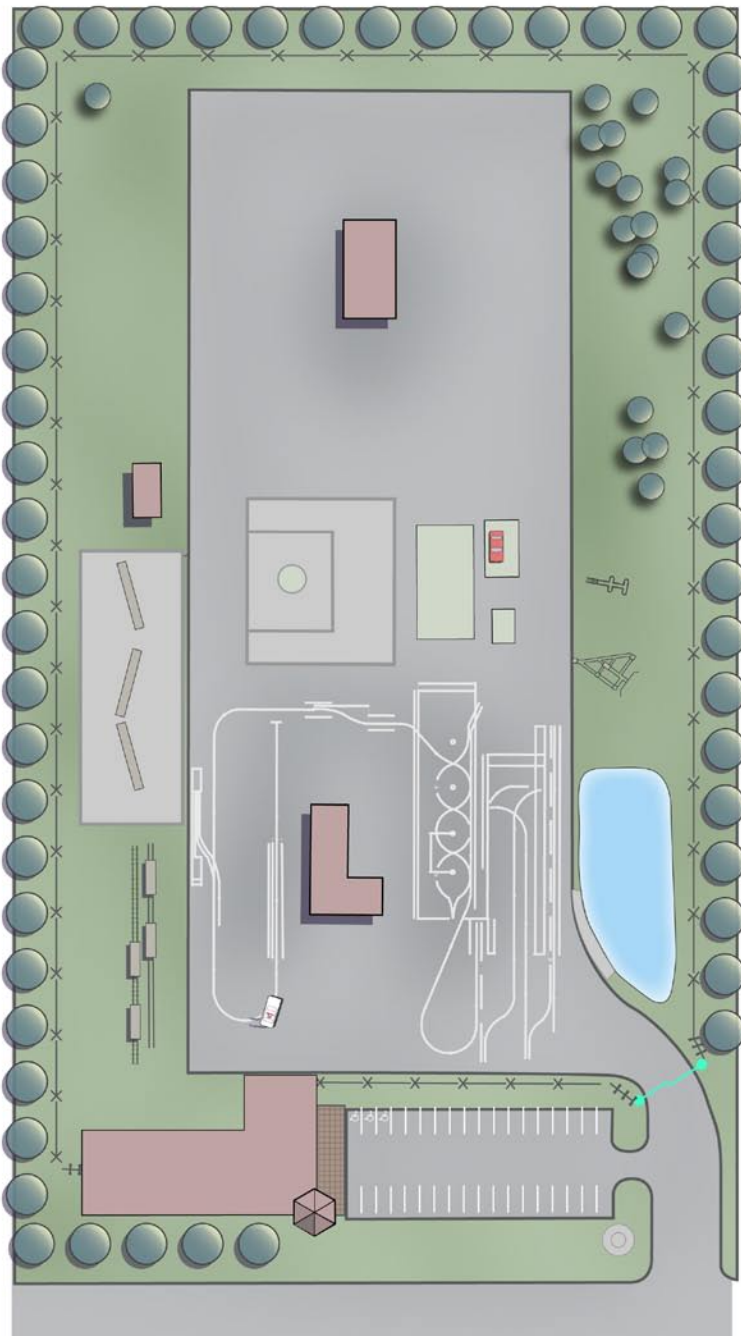
**FIRE TRAINING CENTER**  
**Conceptual Design**

December, 2004



02.25.05

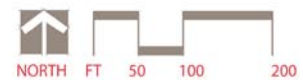
## SITE MASTER PLAN CONCEPTS



*Grand Island, Nebraska*

## FIRE TRAINING CENTER Conceptual Design

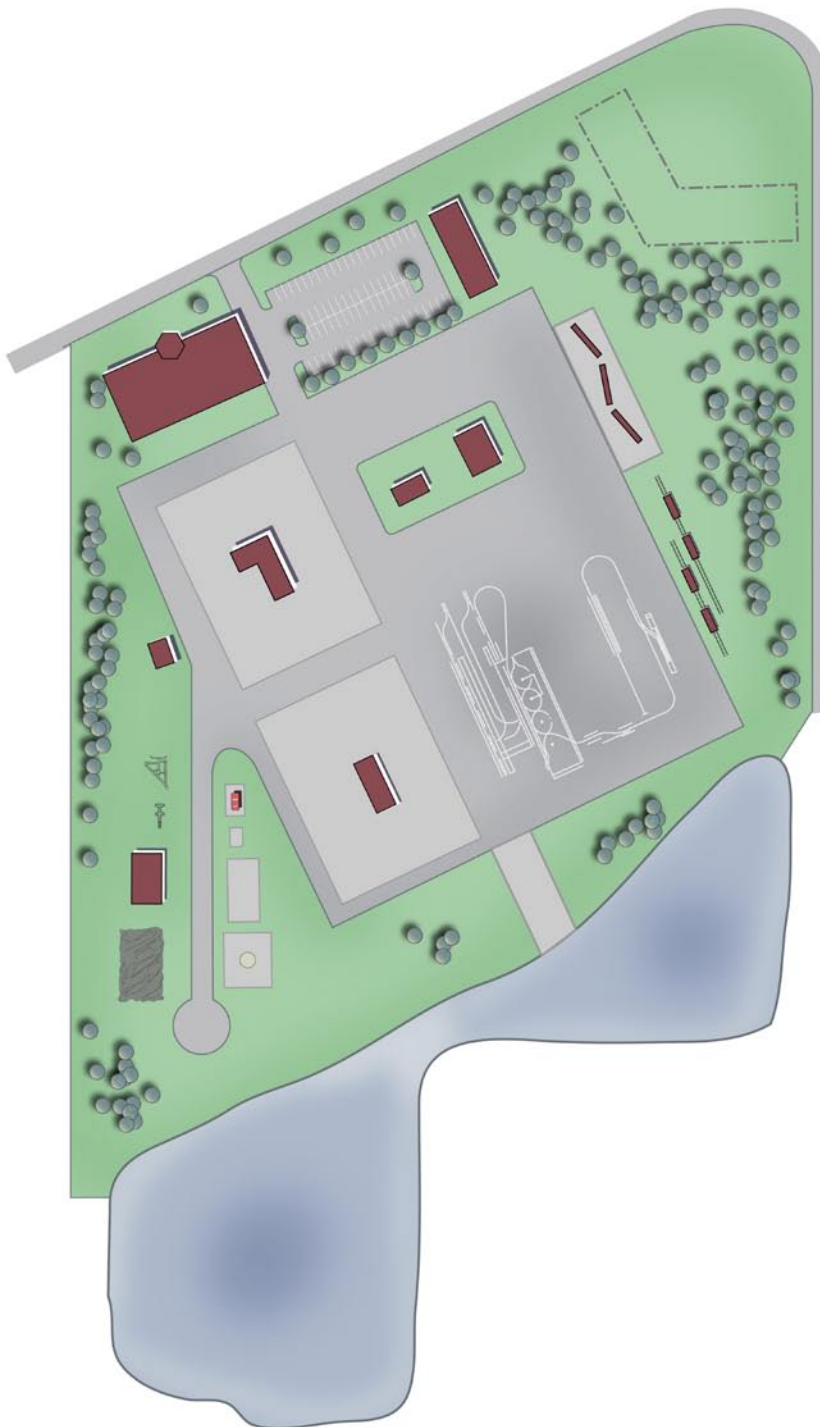
December, 2004



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## SITE MASTER PLAN CONCEPTS



Grand Island, Nebraska

### **FIRE TRAINING CENTER** Conceptual Design

December, 2004



02.25.05

## SITE MASTER PLAN CONCEPTS



*Grand Island, Nebraska*

### FIRE TRAINING CENTER Conceptual Design

December, 2004

# IV



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## TRAINING CENTER SITE LOCATION ANALYSIS

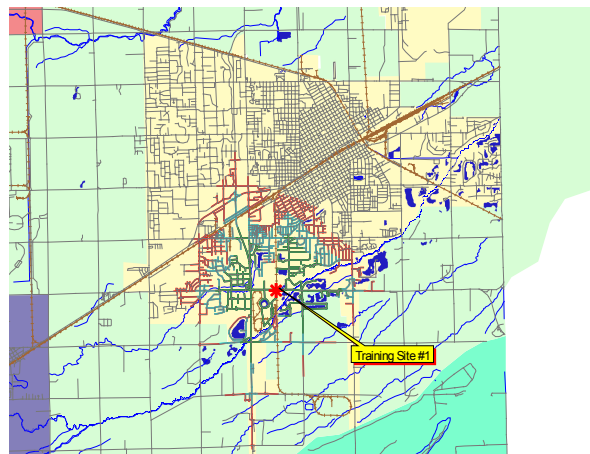
### Training Site #1 - Central Community College and College Park Area

#### Pros

1. Potential partnership between training center and college for providing classrooms, administration offices, conference rooms, auditorium and dormitories.
2. College could begin curricula for fire training.
3. Training center extends the college campus, creating a more prominent civic presence.
4. Adjacent land sufficient for fire training props.
5. Site is in close proximity to freeway and arterial streets, providing good access to the entire community.
6. City desires to redevelop blighted property.
7. Trees screen property from adjacent land uses, limiting the presence of the burn building to neighboring properties.
8. Site could maintain debris for USAR
9. Access to existing standing water

#### Cons

1. Purchasing a site.
2. Rehabilitating site for development.
3. Prevailing winds to be reviewed.
4. Limited space for future expansion.
5. Longer response time to downtown.



02.25.05

## Training Site #2 - Fonner Park

### Pros

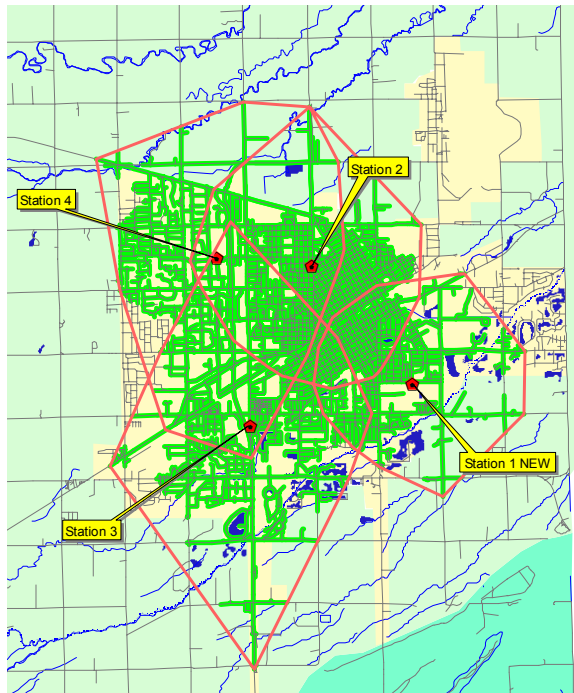
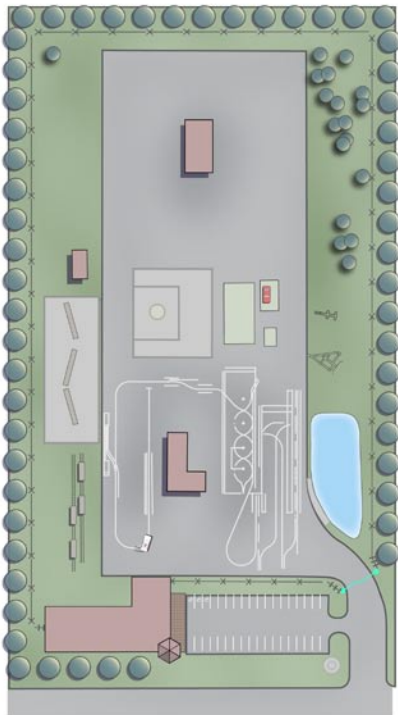
1. Land available at no cost.
2. Opportunity to share cost of parking and EVOC with Fonner Park
3. Close proximity to freeway and arterials.
4. Infrastructure available

### Cons

1. Potential traffic congestion during events at Heartland of America Park.
2. Potential issues with neighbors, resulting from smoke and noise.
3. Limited buffer area
4. The build-out of Fonner Park lends itself to entertainment uses, not necessarily a fire training facility.

## TRAINING CENTER SITE LOCATION ANALYSIS

Strategy "C" Six-Minute Response Time Performance



## TRAINING CENTER SITE LOCATION ANALYSIS

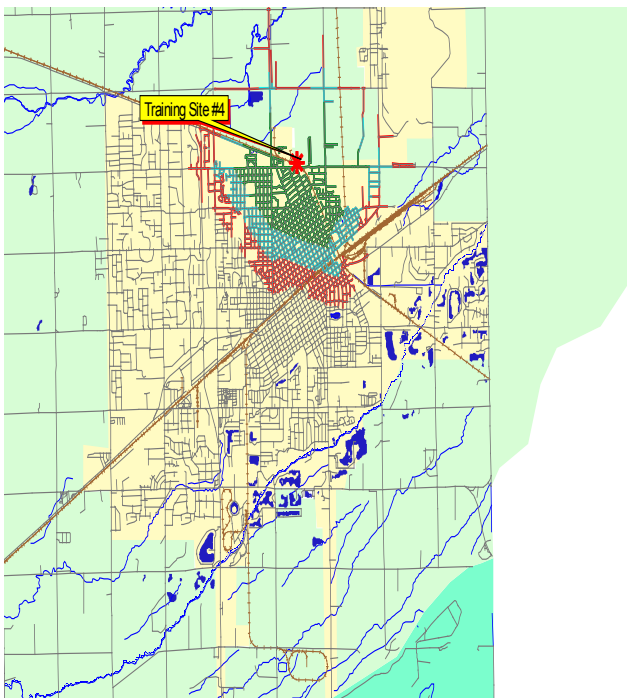
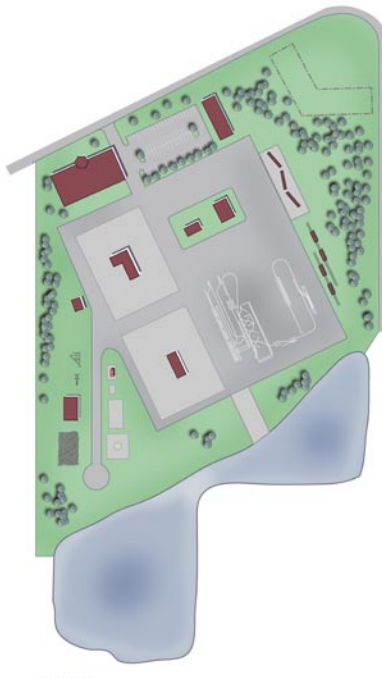
### Training Site #3 - Near Law Enforcement Center

#### Pros

1. Creates civic public safety campus for Grand Island
2. Large unencumbered site
3. Water available nearby
4. May be able to utilize existing industrial buildings
6. Good response times to downtown density.
7. Minimal neighbor issues
8. Allows a fire station to be co-located at the site
9. Easy access to city administration

#### Cons

1. Water is currently used for recreation
2. Land has to be purchased.
3. Impedes developable land to downtown
4. Limited area for future development
5. Odor from processing plant may influence visitors perception of facility
6. Traffic issue with associated police station
7. Poor access to freeway



02.25.05

## TRAINING CENTER SITE LOCATION ANALYSIS

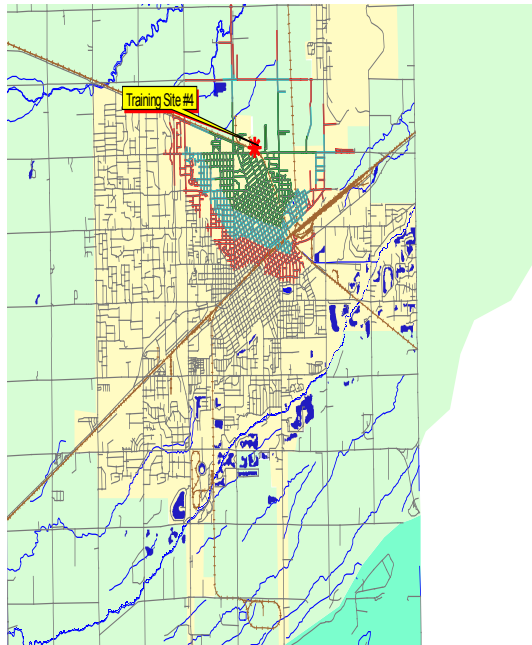
### Training Site #4 - Capital Avenue E Farm Land

#### Pros

1. Large site with no foreseeable limits on future site development.
2. Utilities are available.
3. Good response times to downtown.
4. No foreseeable neighbor concerns.
5. Allows administration to be co-located at training center.
6. Potential to extend a recreational trail around the training center.

#### Cons

1. Land has to be purchased, which could be high.
2. Would require an entire campus to be built at site
3. Cost to bring infrastructure on site.



**Training Center Site Grading Matrix**

Four sites throughout Grand Island were considered for the city's proposed fire training center. Land adjacent to the community college, on the Fonner Park complex, and adjacent to the proposed police training center, and on the city's north side were all reviewed and graded. Using a six-point scale, as shown by the following matrix, the most favorable location is Site #1 (community college and College Park area), followed closely by Site #2 (the Fonner Park complex). As shown, all four sites are suitable for the development of a high-quality fire training center.

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		Site No. 1 (College)	Site No. 2 (Fonner Park)	Site No. 3 (Public Safety)	Site No. 4 (North Site)
1	Land Costs	3	4	2	1
2	Neighborhood Impact	3	1	4	4
3	Infrastructure Availability	3	4	3	4
4	Response Time/Coverage	2	1	3	3
5	Co-locate Station	1	2	4	1
6	Co-locate Administration	4	4	4	4
7	Access to Freeway	4	3	2	1
8	Availability to Classrooms	4	2	1	1
9	High Bay	1	2	1	1
10	Facility Cost of Option	4	3	2	1
11	Growth Potential	3	1	3	4
12	Redevelopment of Sites	4	1	2	2
13	Existing Learning Infrastructure	4	1	1	1
14	EVOC - Emergency Vehicle	2	4	1	1
15	Potential State/Federal Aid	6	3	2	2
16	Local Partnering Resources	6	1	2	1
17	Willingness of Seller	3	4	2	1
Total		57	41	39	33

\* Graded as 1 being acceptable to 6 being favorable

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The team's site-selection criteria included response times from the site, the site-selection matrix, the ability to co-locate the new fire station, impact on neighbors, infrastructure access, availability and cost of land, ability of the site to accommodate growth, and access to existing teaching infrastructure. It should be noted that a business plan was not factored into the selection of the sites. A completed business plan would provide additional information that could have an impact on the final selection.

Based on these factors, the RDG team recommends Site #1 because of its proximity to the educational infrastructure available at Central Community College and College Park. Both administrations are willing to discuss partnering for facilities and operations of the facility. Both institutions have indicated that they would consider developing land they already own for the fire training center's needs. The fire department could purchase land adjacent to both institutions in addition to any land that may be available to them on either institution's site. This land would be well suited for the placement of the burn building. Moreover, selection of this site would be a vehicle for cleaning a blighted area. The training center, by sharing either institution's facilities, may have additional state and federal resources made available.

The RDG team recommends Site #3 as a second choice for the training site. It offers the fire department the quickest response times to the densest part of Grand Island, allows the co-location of both the fire headquarters and fire station on the site with easy access to city hall, and will have minimal impact on its neighbors. This site will require the purchase of land, which will impact the overall cost of the project.

Sites #2, located at Fonner Park, ranks second by the matrix. Because of the impact that the noise and smoke from the training center might have on neighbors and because of the inability to provide major buffering, the team feels it would be irresponsible to select Fonner Park. Doing so would restrict future entertainment development that may be better suited for Fonner Park. However, it is recommended that the city discuss possible cost sharing for upgrading the facility's parking lot to accommodate an emergency vehicle operations course (EVOC) at this site and review the schedule for the facilities for possible high-bay opportunities.

Site #4, on the north side of Grand Island, is in many ways the most suitable because of the industrial use of the area, availability of utility infrastructure, acreage for future growth, strong response times, and good coverage of downtown Grand Island. However, it would be the most costly to develop from the standpoint of total project cost—land costs, facility development, and phasing costs.

In conclusion, the above site recommendations are based on information provided to the team as well as on the team members' background and expertise. These recommendations are made without benefit of a detailed business plan. We recommend that a business plan be performed prior to finalizing the selection of the site for the training center.

Based on our involvement with comparable facilities, we think it is likely that a business plan would support Site #1 as the most economically and operationally viable for the City of Grand Island. Even if the main functions of the training center are located elsewhere, we recommend evaluating whether the EVOC functions can be located at Fonner Park.

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