

Application for a Context Sensitive Solutions Transportation Project Site Plan Review

Municipality of Anchorage
Planning Department
PO Box 196650
Anchorage, AK 99519-6650

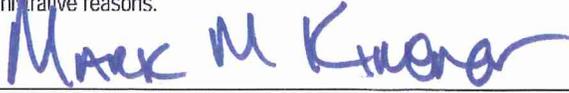
Please fill in the information asked for below.

PETITIONER (Municipal or State Project Manager)	PETITIONER REPRESENTATIVE (IF ANY - Consultant)
Name (last name first) MOA Office of Planning, Development and Public Works	Name (last name first) Kimerer, Mark - Bettisworth North Architects and Planners
Mailing Address Project Manager: Steven Gillette P.O. Box 196650 Anchorage AK 99519-6650	Mailing Address 2600 Denali St., Ste. 710 Anchorage, AK 99503
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PROJECT INFORMATION (SEE ATTACHED PROJECT NARRATIVE)
Project Name: Academy Drive/Vanguard Drive Area Traffic Circulation Improvements Brayton Drive to Abbott Road MOA/ADOT Project #: 09-004
Community Council(s): Abbott Loop Community Council
Project description (location): (use additional sheet if necessary) (SEE ATTACHED PROJECT NARRATIVE)

TRANSPORTATION PROJECT SITE PLAN APPROVAL REQUESTED
<input type="checkbox"/> Context Sensitive Solutions Concept Report (Planning and Zoning Commission) <input type="checkbox"/> Draft Design Study Report (Planning and Zoning Commission) <input checked="" type="checkbox"/> Plans in Hand (Urban Design Commission) <input type="checkbox"/> Other:

I hereby certify that (I am)(I have been authorized to act for) owner of the property described above and that I petition for a site plan review in conformance with Title 21 of the Anchorage Municipal, Code of Ordinances. I understand that payment of the application fee is nonrefundable and is to cover the costs associated with processing this application, and that it does not assure approval of the site plan. I also understand that assigned hearing dates are tentative and may have to be postponed by Planning Department staff, the Planning and Zoning Commission or Urban Design Commission for administrative reasons.

6/3/2015	
Date	Signature (Agents must provide written proof of authorization)

Accepted by: 	Poster & Affidavit:	Fee \$5400 ⁰⁰ pd thru 2014-043 DSR Stage	Case Number 2015-0067
Road SPR (New 04/20/10)*Front			

REQUIRED SUBMITTALS (SEE EACH SECTION FOR APPLICATION TYPE BELOW)**CONTEXT SENSITIVE SOLUTIONS CONCEPT REPORT DOCUMENTATION**

- Transportation Project Site Plan Review Application with original signatures
- Concept report
- Environmental Analysis or Environmental Impact Study, if applicable
- Letter of Authorization, if applicable
- Project Description Form (CSS Attachment #1)
- 15 Sets of above noted documents; no agency routing other than Community Council(s)

DRAFT DESIGN STUDY REPORT (35% LEVEL OF DESIGN) DOCUMENTATION

- Transportation Project Site Plan Review Application with original signatures:
- Letter of Authorization, if applicable:
- Design Study Report Summary, including:
 1. Introduction
 - A. Location Map and Project Boundaries
 - B. Purpose
 - C. Need
 2. History (Project Origin) and Input from other Planning Documents
 - A. Anchorage Comprehensive Plan
 - B. Local Planning Studies/CIP/TIP/LRTP
 - C. Anchorage Pedestrian Plan or Areawide Trails Plan
 3. Existing Conditions
 - A. Right-of-Way Availability
 - B. Traffic Conditions
 - C. Pedestrian Conditions
 - D. Context (Land Use, Street Character)
 - E. Existing Landscape
 - F. Existing Utilities
 - G. Existing Drainage
 4. Design Standards

What Standard is the project being designed to? (Collector, Arterial, OSHP Classification, LRTP typology, etc.)

How do existing conditions impact the ability to meet those standards?
 5. Design Alternatives
 - A. Design narrative and graphic for each alternative considered. Note that the discussion of each alternative should address traffic (and traffic calming), parking, pedestrian facilities, drainage, and utilities (to include lighting), and right of way considerations (does right of way need to be purchased?)
 - B. Recommended Alternative with narrative (why is it recommended?) To include a discussion of the landscape approach and other enhancements (gateway features, fencing, etc.)
 6. Public Involvement Summary
 7. Rough Estimated Project Cost
 8. Maintenance Considerations
 9. Response to comments from Concept Report Review
 10. Appendix A – Preliminary Project Plans
- 35 Sets of above noted documents

PLANS IN HAND (55-75% LEVEL OF DESIGN) DOCUMENTATION

Application for site plan review

- Road Project Site Plan Review Application with original signatures
- Letter of Authorization, if applicable
- Memo addressing Review Comments from DSR Review
- 55% to 75% Project Plans
- Review Questionnaire (see below)
- 35 Sets of above noted documents

Plans In Hand Supplemental Review Questionnaire:

The Urban Design Commission shall consider the following criteria in reviewing public facility project landscaping under this section (AMC 21.15.125 Public facility project landscaping review). Each standard must have a response in as much detail as it takes to explain how your project satisfies the standard. The burden of proof rests with you. Use additional paper if needed.

Cost.
(SEE ATTACHED PROJECT NARRATIVE)

Hardiness and feasibility of the proposed plant materials.
(SEE ATTACHED PROJECT NARRATIVE)

Explain how planning and design criteria are met by the proposed landscape plan:

The external impacts generated by the public facility project on adjacent areas. The landscape elements of the public facility project should complement, maintain or improve the landscape quality of adjacent neighborhoods and areas.
(SEE ATTACHED PROJECT NARRATIVE)

The degree to which the landscape elements contribute to on-site use of the public facility project. The landscape elements of the public facility project should enhance safe, efficient and comfortable public use.
(SEE ATTACHED PROJECT NARRATIVE)

The visual attractiveness of the landscaping and its enhancement of the architecture of the public facility project, including the integration of internal and exterior architectural themes.
(SEE ATTACHED PROJECT NARRATIVE)

Plans In Hand Supplemental Review Questions, Continued

The Urban Design Commission shall consider the following criteria in reviewing public road projects under this section (explain how the Context Sensitive Solutions planning and design criteria are met by the proposed plan). Each standard must have a response in as much detail as it takes to explain how your project satisfies the standard. The burden of proof rests with you. Use additional paper if needed.

The degree to which the design features contribute to on-site use of the road project. These features should enhance safe, efficient and comfortable public use.

(SEE ATTACHED PROJECT NARRATIVE)

Effective use of winter cities design principles in our northern setting.

(SEE ATTACHED PROJECT NARRATIVE)

Describe the project's contribution to developing an attractive streetscape.

(SEE ATTACHED PROJECT NARRATIVE)

Response to comments and conditions of approval from Design Study Report review.

(SEE ATTACHED PROJECT NARRATIVE)

**Academy Drive / Vanguard Drive Area
Traffic Circulation Improvements
Brayton Drive to Abbot Road Application
for a Context Sensitive Solutions
Transportation Project Site Plan Review**

PROJECT LOCATION MAP

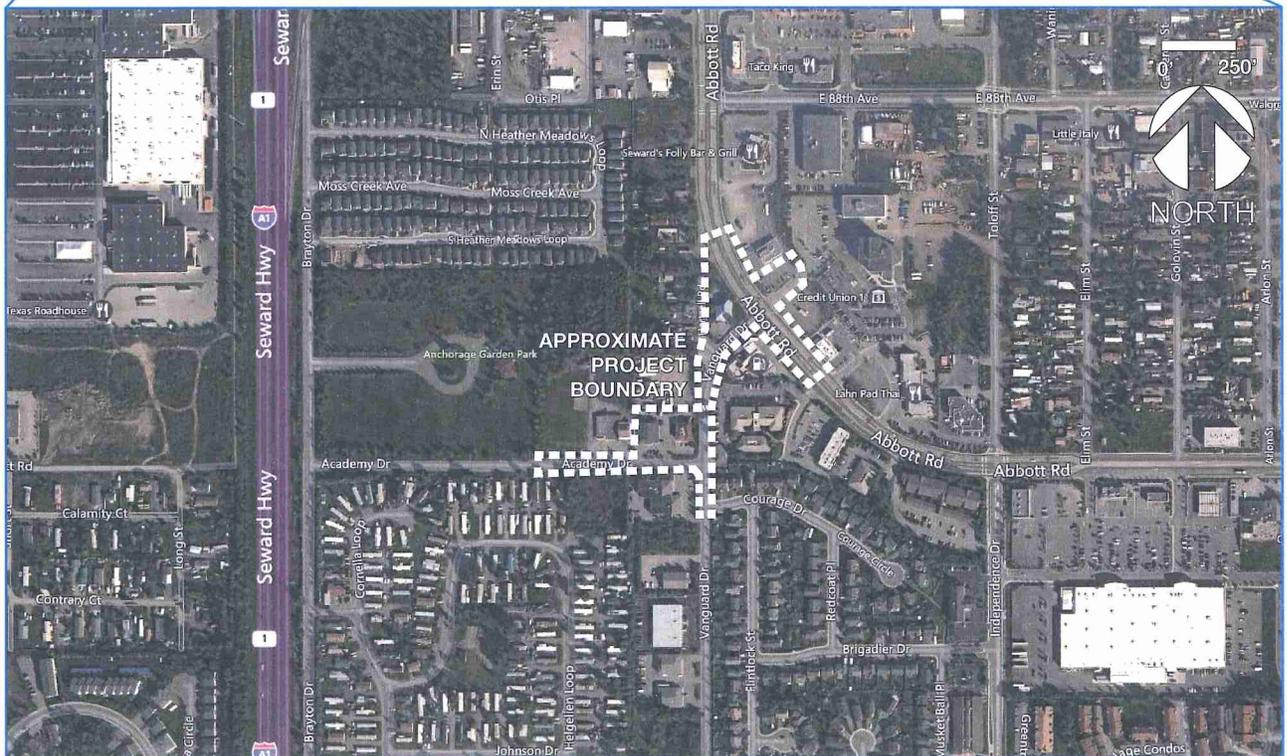
MOA Project # 09-004



BETTISWORTH NORTH

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*ACADEMY DRIVE / VANGUARD DRIVE AREA
TRAFFIC CIRCULATION IMPROVEMENTS*
Brayton Drive to Abbott Road

*Application for a Context Sensitive Solutions
Transportation Project Site Plan Review*

Project Narrative and Supplemental Information

RESPONSE TO COMMENTS AND CONDITIONS OF APPROVAL FROM DESIGN STUDY REPORT REVIEW

The Planning and Zoning Commission reviewed the Academy Drive / Vanguard Drive Area Traffic Circulation Improvements Project on April 7th, 2014. The DSR was approved without conditions.

PROJECT DESCRIPTION

The Municipality of Anchorage Project Management and Engineering Division (MOA PM&E) has contracted with CRW Engineering Group, LLC to provide professional services to evaluate alignment alternatives for the connection of Academy Drive / Vanguard Drive to Abbott Road. This project is being done in collaboration with the Alaska Department of Transportation's (ADOT) Seward Highway / 92nd Avenue Grade Separation Project, which is designed to help alleviate congestion in the Dimond Boulevard / Seward Highway area. Together, the projects will provide an alternative east/west connection to distribute traffic across the transportation network. The goals of the Academy Drive / Vanguard Drive project are to:

- Provide an efficient and logical connection from the terminus of ADOT's proposed 92nd Avenue grade separated connection from Academy Drive to Abbott Road
- Upgrade the new alignment to current MOA Class II Minor Arterial standards
- Provide pedestrian and bicycle facilities to improve connectivity and user experience
- Evaluate and balance, to the extent practicable, impacts to local access, businesses, and adjacent neighborhoods

DESIGN CHALLENGES

- The project corridor is largely developed with a mix of residential, commercial, and light industrial uses. The result is that all alternatives presented during the Context Sensitive Solutions (CSS) process had some degree of impact to existing properties, ranging from modified access to full property acquisition.
- The alignment of the traffic circulation improvements had to balance the need for regional mobility and connectivity with local business and residential access.

- Existing driveways and structures, combined with the curvature of Abbott Road, pose challenges to mobility, access, and sight distances. Existing signals at Independence Drive and 88th Avenue are also limiting factors for placement of a new intersection along the corridor.

PROJECT SCHEDULE

Design Study: September 2011 to March 2014
Design: February 2014 to January 2016
Right of Way: April 2014 to December 2015
Utilities: January 2015 to December 2015
Bid Phase: January 2016 to March 2016
Construction: May 2016 to June 2017 (Pending Funding)

EXISTING CONDITIONS

Academy Drive / Vanguard Drive Area Traffic Circulation Improvements

The project area is located in South Anchorage and includes realignment of the Academy Drive and Vanguard Drive intersection as well as intersections at Hartzell Road and Abbott Road. The landscape along both Academy Drive and Vanguard Drive is comprised of mostly mature plantings, wood screen fences, boulders as property delineators and pockets of ornamental landscape planting areas.



Figure 1: Aerial Context Map and Project Area

The project extents will include property acquisitions for additional Right-of-Way (R.O.W.) to allow for realignment of Academy Drive. Also proposed are improvements to the commercial access drive to the northeast at the intersection of Abbott Road and Vanguard Drive to accommodate a right turn lane at the proposed signalized intersection.

Academy Drive

The landscape along Academy Drive from Brayton Drive to Vanguard Drive is comprised of mostly mature spruce, birch and cottonwood trees with screen fences, boulder delineators and pockets of ornamental landscape planting areas associated with subdivision and commercial developments. The alignment is short in length, but is made up of two distinctly different halves.

Academy Drive is split into a western portion that includes the areas adjacent to the Anchorage Family Church (north) and the Southwood Manor Mobile Home Park (south) and an eastern portion adjacent to the Korean Assembly of God and commercial developments that contains the Cornerstone Clinic, Vanguard, Beacon, and the Alaska Medical Missions (north) and the Cook Inlet Soccer Club and Alaska Division of Public Health (south).

Street lights line the north edge of Academy Drive. No pedestrian, bicycle, or transit facilities currently exist on this street segment.

Landscape areas at the west end of Academy Drive, extending from the Brayton Drive intersection to the Korean Assembly of God, are predominately lawn and mature birch and spruce trees. On either side of the gutter-lined, asphalt road, the adjacent parcels have been delineated by physical barriers. Boulders separate the gutter-lined street from an expansive lawn to the north and a wooden privacy fence, located just south of the R.O.W., separates the Southwood Manor development from Academy Drive.

Along the eastern section of Academy Drive, landscaped entry drives associated with commercial developments provide access to Academy Drive closer to the Vanguard Drive intersection and include washed rock mulch and boulders; birch, maple, Canada red, and spruce trees; and shrub plantings. The landscape plantings are partially overgrown and appear to receive intermittent maintenance. The landscape area to the south includes maintained lawn areas. Utility lines, fire hydrants, and vehicular entry drives are all located in the R.O.W. on Academy Drive in this section. (See Figures 1 and 2)

Vanguard Drive

Vanguard Drive stretches from Independence Drive (south) to Abbott Road (north). The streetscape along the east edge is adjacent to residential use with street trees, boulders, and wood privacy fences from Independence Drive to the Academy Drive intersection. As Vanguard Drive heads north from the intersection of Academy Drive an office complex (the R&M building) and the Tesoro gas station occupy the eastern edge. To the west, along Vanguard Drive, there are a variety of uses that include medium-density residential areas, vacant lots, offices, and a storage yard.

Street lights line the west edge of Vanguard Drive south of Courage Drive and the east edge of Vanguard Drive from Courage Drive to Abbott Road. No pedestrian, bicycle, or transit facilities currently exist on this street segment. The street section consists of asphalt pavement with concrete curb and gutter.

This project will affect areas north of Courage Drive, where the use along both the east and west edge of Vanguard Drive is predominately offices with the exceptions of a single adjacent residence, the storage yard in the northwest

quadrant at the intersection of Hartzell Drive, and the Tesoro gas station at Abbott Road. Starting at Courage Drive, the east edge of Vanguard Drive includes wood privacy fences and birch street trees along the residential area, and transitions to mature spruce and birch trees as it rounds the bend towards the Tesoro gas station. A single mature Amur chokecherry tree is located in a landscape bed at the southeast corner of Abbott Road and Vanguard Drive. The west edge of Vanguard Drive is home to existing mature vegetation as well, with predominately spruce, Canada red and birch trees located adjacent to offices and an established overgrowth of cottonwood adjacent to the storage yard at the corner of Hartzell Road. The dense cottonwood stand ranges from approximately 15' to 30' in height and provides a vegetative screen from the road and adjacent light industrial use. (See Figure 3)

Hartzell Road

Hartzell Road is a short cul-de-sac road that extends north from Vanguard Drive near the intersection of Abbott Road. The road provides access to three residential parcels and a storage yard to the west and an office building (Alaska Structures) to the east. Limited mature vegetation exists on the road segment and is generally associated with the privately owned parcels. The road is asphalt pavement with concrete gutter and has no street lighting, and no pedestrian, bicycle, or transit facilities. An informal cut-through from the cul-de-sac to the multi-use trail on Abbott Road exists, suggesting intermittent pedestrian and/or bicycle use, likely as a shortcut from the residential areas to the south and the commercial development along Abbott Road. (See Figure 4)

Commercial Development Access Drive

The commercial development immediately opposite Vanguard Drive, across Abbott Road, is served by an asphalt paved access drive with concrete curb and gutter with the exception of a vacant plot with a large gravel pad that lacks any delineation at the southeast corner of Abbott Road and the commercial access drive. The existing commercial landscape planting areas contain washed rock mulch, boulders, spruce and Canada red trees and various shrubs, including large masses of mugho pine in the GCI parking lot landscape areas. There are no street lights, but utilities, fire hydrants and parking lot lighting were noted along the short segment projected to be impacted by the project. There are no pedestrian, bicycle, or transit facilities on this road segment. (See Figure 5)

EXISTING CONDITIONS IMAGES



Figure 2: Academy Drive looking east from Brayton Drive



Figure 2: Academy Drive looking north and east near Vanguard Drive intersection



Figure 3: Vanguard Drive at Courage Drive



Figure 4: Hartzell Road looking south toward Vanguard Drive from cul-de-sac



Figure 5: Commercial access drive looking south toward Vanguard Drive and Abbott Road intersection from the Credit Union 1 parking lot entry

GUIDING PLANS

Anchorage 2020: Anchorage Bowl Comprehensive Plan:

The Anchorage Bowl Comprehensive Plan sets forth the goals, objectives, and policies for growth in Anchorage for a 20 year planning horizon. The Comprehensive Plan includes land use and transportation goals that are necessary to ensure orderly growth patterns and efficient transportation networks. The policies that guide this project include:

- Policy 37: “Design, construct and maintain roadways or rights-of-way to accommodate pedestrians, bicyclist, transit users, the disabled, automobiles and trucks where appropriate.”
- Policy 38: “Design, construct and maintain roadways or rights-of-way to promote and enhance physical connectivity within and between neighborhoods.”

Anchorage 2020 Comprehensive Plan identifies this area as part of the Dimond/Abbott Town Center. Town Centers are the focus of community activity for smaller subareas of Anchorage and include retail shopping, services, public facilities, and a mix of medium to high-density residences. Because this area is a shopping destination for central and southeast Anchorage neighborhoods, efficient traffic circulation is important now, and especially for the future, as demand on the transportation network continues to increase.

2035 Metropolitan Transportation Plan (MTP):

The MTP provides the policies to implement Anchorage’s transportation goals and provide for an efficient transportation network for the movement of people and goods. One strategy recommended in the MTP to achieve an efficient transportation network is to complete the roadway grid system. To address capacity and circulation, constructing a grade separated intersection at the Seward Highway/92nd Avenue intersection and extending 92nd Avenue/Academy Drive from Brayton Drive to Abbott Road is included as short-term projects (2011-2023) in the MTP. Bicycle lanes and separated pathways are recommended along 92nd Avenue/Academy Drive.

2005 Official Streets and Highways Plan (OS&HP):

In the OS&HP, Academy Drive and Vanguard Drive (north of Academy Drive) are classified as minor arterials. A minor arterial carries 10,000 to 20,000 vehicles a day and are primarily intended to move through traffic. Direct access to commercial property is controlled to limit the number of permitted driveways. Where possible, driveway access should be shared with adjacent property owners. Abbott Road is classified as a major arterial. Major arterials are designed to rapidly move large volumes of traffic (over 20,000 vehicles a day) and access should be carefully controlled.

Anchorage Pedestrian Plan 2007:

The Anchorage Pedestrian Plan, one of three components of the Anchorage Non-Motorized Plan, guides development in regards to providing a complete pedestrian network. There are no specific projects recommended for Academy or Vanguard Drives in the pedestrian plan.

Anchorage Bicycle Plan 2010:

The Anchorage Bicycle Plan recommends on-street bicycle lanes and a multi-use pathway on Academy and Vanguard Drives.

Areawide Trails Plan 1997:

The Areawide Trails Plan identifies a multi-use paved trail along Academy and Vanguard Drives.

APPLICABLE DESIGN CRITERIA

According to Chapter 3 (see 3.5.C.3) of the DCM, landscaping efforts for Minor Arterial (Class II) - Urban streets should provide similar landscape functions as Major Arterials (Class III-IIIIC). Major arterial landscapes serve not only as an aesthetic element to improve the streetscape, but also has a significant role in defining the different functional zones within the road section.

A 7'-0" unobstructed separation is desired between back of curb and any pathway or sidewalk to provide for temporary snow storage and utilities. Designs should also consider including a 2'-0" wide textured, colored concrete apron at back of curb as a visual accent as well as a durable surface for snow removal. Additional width should be considered for street tree plantings and to create a landscape buffer to provide visual separation between pedestrians and vehicles. Landscape buffers should be composed of a series of large planting beds with enough open space between planting beds to create a visually cohesive separation but not a visual barrier.

Medians are also recommended, and where applicable, should be a minimum of 16'-0" wide to accommodate trees or a minimum of 4'-0" wide where only shrubs are used. A double-mountable curb is recommended to help elevate plant material and provide further separation from vehicles. A median narrower than 4'-0" is recommended to receive colored, textured concrete surface material in lieu of plantings for maintenance reasons. Medians that include plant materials are recommended to include irrigation to improve survivability in a harsh street environment.

The area beyond the 7'-0" snow storage areas should include a trail and/or landscape installations compatible with, or as a buffer to, adjacent land uses. The use of decorative or screen fences and visual enhancement

landscape should be considered with respect to existing qualities of the neighboring lots. Enhancement of existing landscape is also recommended to better fit the new roadway project into the surrounding community.

DESIGN RECOMMENDATIONS

Typical Roadway Cross Section

The recommended typical cross section for Academy Drive includes two 11-foot travel lanes with 3.5-foot shoulders, Type 1 barrier curb and gutter, an 8-foot pathway on the south side, and an 8-foot sidewalk on the north side. All pedestrian facilities will be ADA compliant. To reduce impacts to adjacent properties and structures, the buffer between the back-of-curb and the pathway or sidewalk varies from 0 to 20 feet. (See Figure 6 below)

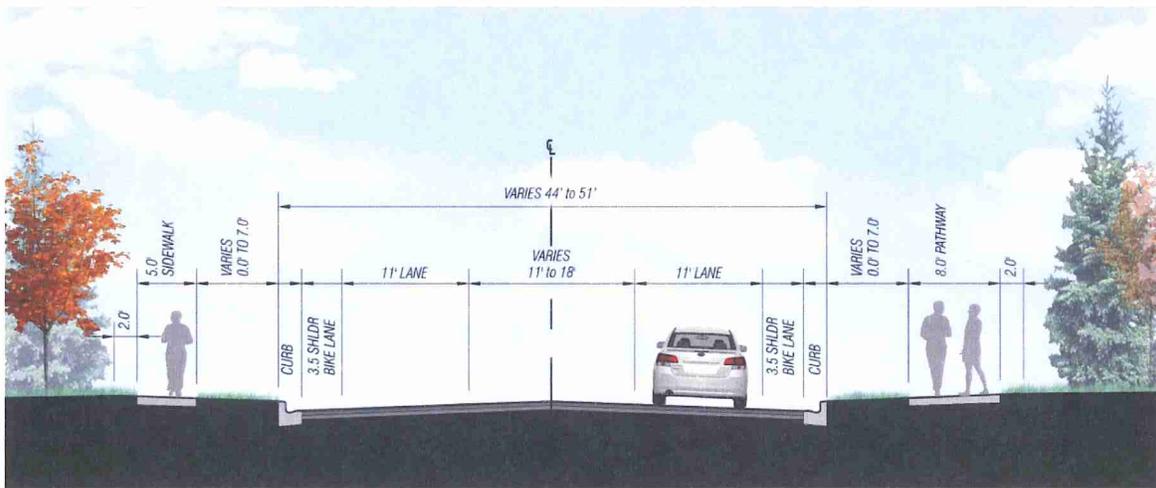


Figure 6: Proposed Typical Cross Section

Proposed Roadway Alignment & Intersection with Abbott Road

The September, 2013, Design Study Report for the Academy Drive / Vanguard Drive Area presented five design alternatives, Alternatives A through Alternative E. A preliminary analysis determined that Alternatives B and C were the most reasonably viable. While both Alternatives B and C were reasonable solutions, they each had unique challenges associated with their development. After multiple work sessions and analyses, MOA Traffic Division recommended Alternative B as the preferred alternative. This was the best balance of efficiently conducting traffic through the network system, maintaining business access, and minimizing impacts to adjacent properties and residences. Alternative B, unlike Alternative C, provided the potential for additional queuing length along Abbott Road for north bound left turns to Academy Drive, should it be needed in the future. The alignment was shifted north to avoid impacts to the Tesoro Gas Station on Parcel 26. As an interim solution until the ADOT 92nd Avenue project is completed, the intersection of Academy Drive and Abbott Road will be two-way stop controlled with Abbott Road as the through movement. Upon the completion of the 92nd Avenue project, a traffic signal will be installed. Signal components will be installed with construction of this project to avoid future construction of below-grade signal appurtenances at the intersection of Academy Drive and Abbott Road. The access easement driveway on the east side of Abbott Road will require upgrades to accommodate the future signal.

Posted Speed

The recommended posted speed is 30 mph, to be consistent with the proposed posted speed for ADOT's 92nd Avenue project.

Lighting

A continuous roadway LED lighting system, current with MOA standards, is proposed.

CONTEXT SENSITIVE SOLUTIONS PROCESS AND PUBLIC INVOLVMENT

The Academy Drive / Vanguard Drive Area Traffic Circulation Improvements Project followed the MOA CSS process and involved agency, business, and public stakeholders. The following is a summary of meetings and information dispersion efforts associated with the CSS process for this project. The meetings and the project were advertised through direct mailing, electronic newsletters, and on the Academy Drive / Vanguard Drive project webpage: <http://www.academyandvanguard.com/>

<i>Meeting</i>	<i>Date</i>	<i>Description</i>
Abbott Loop Community Council Meeting	10/27/2011	Project introduction and overview
Open House #1	12/1/2011	Project kick-off with Community feedback prior to starting the conceptual design
Business Stakeholder Meeting	01/19/2012	Project introduction and overview
Agency Stakeholder Meeting	01/24/2012	Project Update
Planning and Zoning Commission	03/05/2012	Concept Report Presentation
Abbott Loop Community Council Meeting	10/31/2013	Project Update
Business Stakeholder Meeting #2	11/20/2013	Project Update
Open House #2	12/05/2013	Project Update and Presentation of Preferred Alternative
Planning and Zoning Commission	04/07/2014	Draft DSR Approved
Abbott Loop Community Council Meeting	04/24/2014	Project Update
Abbott Loop Community Council Meeting	09/25/2014	Project Update
Open House #3	10/08/2014	Project Update

PLANS IN HAND SUPPLEMENTAL REVIEW QUESTIONNAIRE

Cost

Plant Material Budget: \$62,300
Total Landscape Budget: \$268,870
Construction Budget: \$7.3M

Hardiness and feasibility of the proposed plant materials.

New plant material for the project will only include species hardy to the Anchorage Bowl. Plants were specifically selected to withstand the environmental conditions of climate, vehicular traffic, and general maintenance or the lack thereof. The plantings are a mix of native and non-native species that are proven to be hardy and effective in transportation corridor plantings.

The external impacts generated by the public facility on adjacent areas.

This project has a beneficial impact on the adjacent areas by:

- Improving the roadway to meet current MOA standards for a Class II Minor Arterial
- Providing an efficient and logical connection from the terminus of ADOT's proposed 92nd Avenue grade separated connection from Academy Drive to Abbott Road
- Providing pedestrian and bicycle facilities to improve connectivity and user experience

The degree to which the landscape elements contribute to on-site use of the public facility project.

The proposed landscape improvements will enhance the new vehicular and pedestrian improvements. Landscape plantings are not such that they create hiding places or safety concerns. New landscape plantings will meet the requirements for Site Distance Triangles as defined in the MOA Design Criteria Manual 3.5 B 2 and MOA Title 21 21.45.020. Where there is space within the R.O.W., a separation between back of curb and pedestrian facilities is maintained to enhance pedestrian safety. A 7'-0" separation from landscape plantings is maintained in all areas for maintenance and snow storage.

The visual attractiveness of the landscaping and its enhancement of the architecture of the public facility project, including the integration of internal and exterior architectural themes.

Not applicable to this project.

The degree to which the design features contribute to on-site use of the road project.

Design features that enhance safe, efficient, and comfortable public use of this project include:

- The addition of a barrier curb and gutter to the 11-foot travel lanes.
- Designated bike lanes are provided in alignment shoulders.

- The 8-foot, ADA compliant, pedestrian pathway and sidewalk separated from back of curb where space in the ROW allows.

Effective use of winter cities design principles in our northern setting.

Winter cities design principles integrated into this project design include:

- A minimum of 7 feet snow storage space between back of curb and landscape along the shoulder of the roadway.
- A pedestrian pathway and sidewalk that is separated from the roadway where feasible, providing space for non-motorized circulation in the winter.

Describe the projects contribution to developing an attractive streetscape.

Overall, the landscaping elements maintain the existing character of the roadway and neighborhood.

The landscape plantings at and near the intersection of Academy Drive and Vanguard Drive consist of paper birch, maple, and Canada red deciduous trees, which are species also used in neighboring street plantings. Formal planting beds containing shrubs and perennials are located between the road and the walkway to improve the pedestrian experience. In keeping with neighboring lots, Schedule A seed mix, mowable lawn, covers areas not planted with trees and shrubs.

A larger planting area on the northwest corner of the Academy Drive and Abbott Road intersection provides the opportunity for a larger grouping of deciduous trees in a landscape bed accented by mass plantings of wild iris and rosa rugosa 'Foxi'.

The realignment of Academy Drive and Vanguard Drive impacts the Korean Assembly of God parking lot and landscaping. A new parking lot layout and landscaping to replace the existing lot and landscaping is included in this plan. L1 visual enhancement landscaping is provided along the western edge of the new parking lot. Requirements for clear sight distance triangles at the parking lot driveways conflict with Title 21 parking lot landscape buffer requirements along Academy Drive. In order to provide an attractive landscape along Academy Drive without impacting a driver's ability to see oncoming traffic, tree plantings in this section are limited to 3" caliper Acer platanoides 'Deborah', bare of branches to a height of 8 feet. The Deborah maple tree was selected because it is a larger species tree that can be provided at a larger initial size with branching that takes place above 8 feet. They are placed 20 feet on center. The 10 feet spacing required by L2 buffer landscape is too small/narrow for this species of tree to grow healthily. Shrub plantings in this area are low-growing spirea and wild iris.

The intersection improvements at Academy Drive and Abbott Road require the demolition of existing landscape beds on the northeast corner. The new landscape on that corner incorporates a transplanted existing tree. The new landscape plantings and mulch match the existing theme of the rest of the property. White spruce and birch line the southeastern edge of the realigned parking lot, and dwarf mugo pine and spirea are planted in a formal arrangement to mimic the existing plantings that occur elsewhere on the property.

Medians on Academy Dive receive red brick colored, running bond brick pattern, textured concrete surface material to enhance the streetscape and provide visual interest.

PLANT SCHEDULE

EVERGREEN TREES	QTY.	SYMBOL	ABBR.	LATIN NAME	COMMON NAME	SIZE	FURNISHING NOTES
	8		FG	FICUS GLAUCA	WHITE SPRUCE	6" HEIGHT	BAB

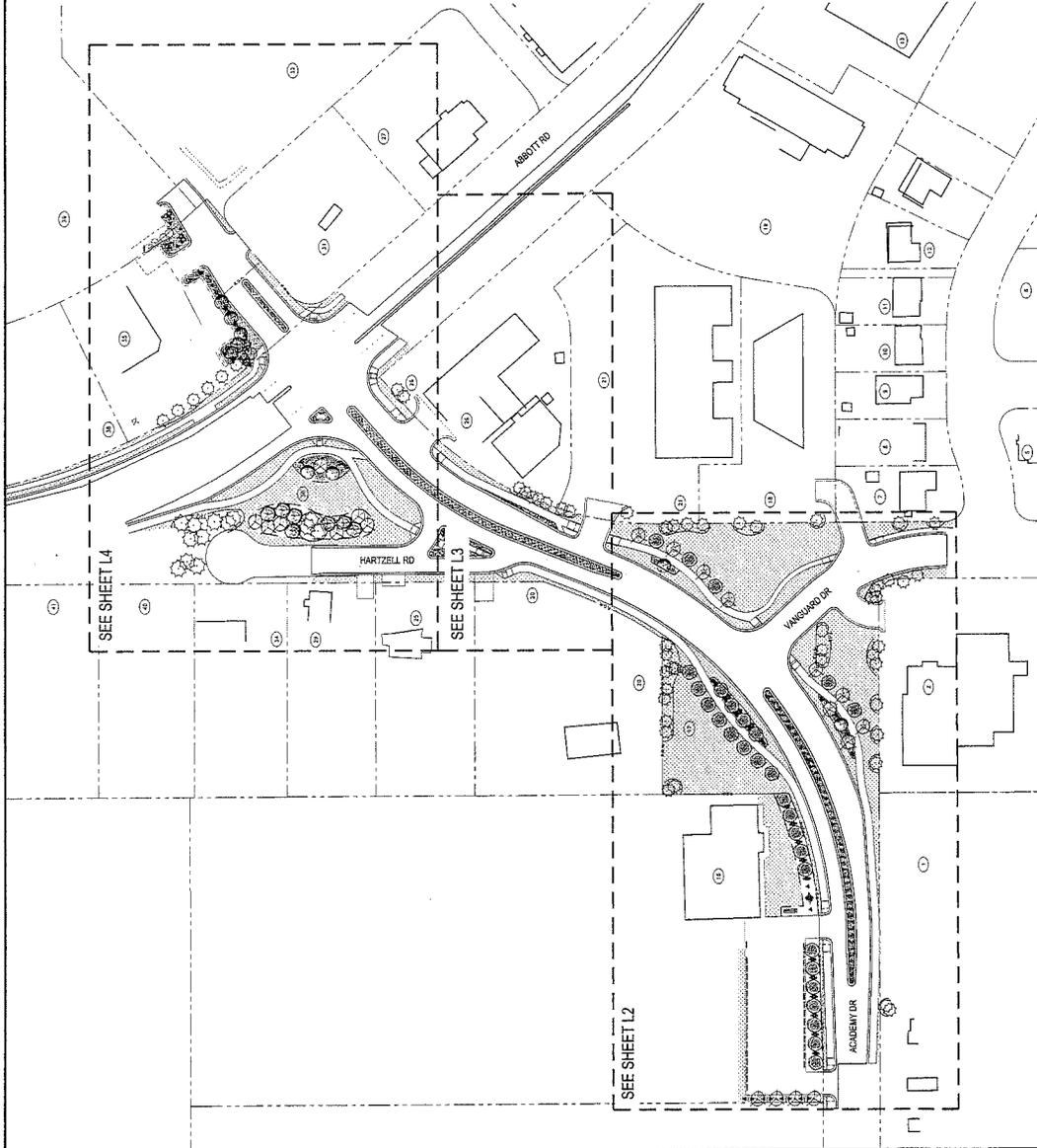
DECIDUOUS TREES	QTY.	SYMBOL	ABBR.	LATIN NAME	COMMON NAME	SIZE	FURNISHING NOTES
	20		BP	BETULA PAPERIFERA	PAPER BIRCH	7" CALIPER	BAB
	29		AP	AZER PLATANOIDES "DECORAH"	DECORAH MAPLE	3" CALIPER	BAB
	7		PV	PRUNUS VIRGINIANA "SHUBERT SELECT"	CANADA RED CHERRY	1.5" CALIPER	BAB
	1			TRANSPLANTED EXISTING TREE			SEE SHEET L4
				EXISTING TREE TO REMAIN			

SHRUBS	QTY.	SYMBOL	ABBR.	LATIN NAME	COMMON NAME	SIZE	FURNISHING NOTES
	35		RG	ROSA RUGOSA	ROSE	#6	POTTED N/A
	214		SW	SPIRAEA JAPONICA	MAGNOLIA SPIREA	#6	POTTED
	22		PM	PRUNUS MUROTO PUMILIO	DWARF MUDDO PINE	#6	POTTED N/A

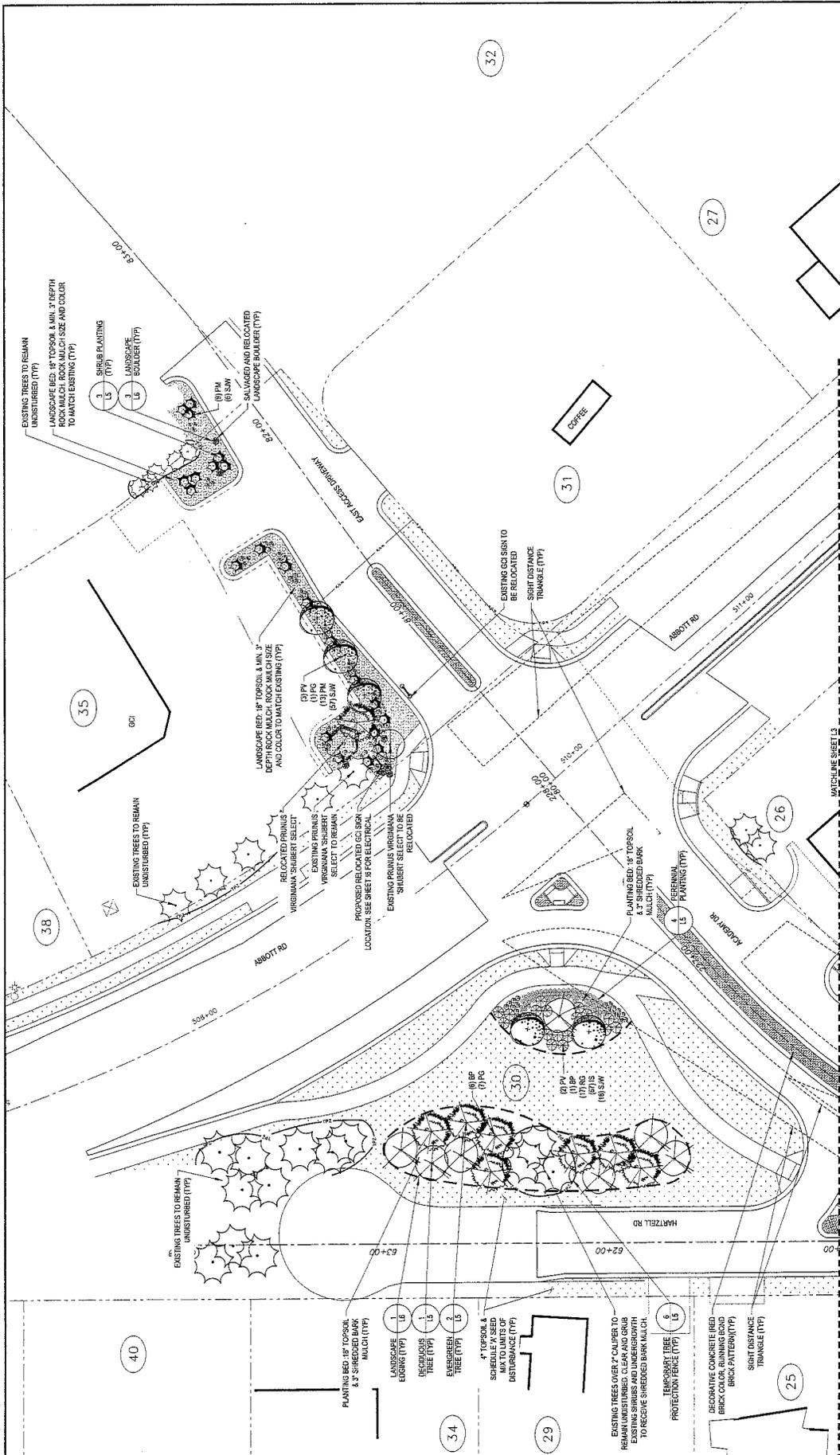
PERENNIALS	QTY.	SYMBOL	ABBR.	LATIN NAME	COMMON NAME	SIZE	FURNISHING NOTES
	183		IS	IRIS SETOSA	WILD IRIS	#1	POTTED

MISCELLANEOUS	QTY.	SYMBOL	DESCRIPTION	NOTES
7		RM	ROCK MULCH, 3" DEPTH	

GENERAL NOTES:
 1) ALL DECIDUOUS TREE PLANTINGS TO INCLUDE MOOSE PROTECTION FENCING PER DETAIL & SHEET L4
 2) ALL PLANTINGS TO BE NURSERY GROWN
 3) ALL PLANTING BEDS TO BE 10" TOPSOIL AND 3" DEPTH, BI-RECCED BARK MULCH, UNLESS OTHERWISE NOTED IN PLANS



 CITY OF ALBEMARLE PUBLIC WORKS DEPARTMENT PROJECT MANAGEMENT AND ENGINEERING DIVISION AREA TRAFFIC CALCULATION IMPROVEMENTS OVERALL LANDSCAPE PLAN		SHEET NO. 08-04 DATE: JUNE 2013 DRAWN BY: N/A CHECKED BY: ESK SCALE: 1"=60' SHEET 1 OF 6
BETTSMORTH CONSULTANT		SCALE: 1"=60' SHEET 1 OF 6
DATA PROVIDED BY: DATE: _____ PREPARED BY: DATE: _____ CHECKED BY: DATE: _____ APPROVED BY: DATE: _____	DESIGN CHECKED BY: DATE: _____ DRAWN BY: DATE: _____ CHECKED BY: DATE: _____ APPROVED BY: DATE: _____	GRAPHIC SCALE 0 50 100 150 180 FEET
REVISIONS NO. DATE DESCRIPTION 1. DATE PROVIDED BY: _____ 2. DATE PROVIDED BY: _____ 3. BASED ON PERIODIC FIELD OBSERVATIONS BY THE ENGINEER OR AN INSPECTOR UNDER HIS/HER DIRECT SUPERVISION. DATA INDICATED AS "PROVIDED" DATA APPEARS TO REPRESENT AS CONSTRUCTED. DATA INDICATED AS "OBSERVED" DATA APPEARS TO REPRESENT AS CONSTRUCTED.		



REVISION RECORD

NO.	DATE	DESCRIPTION

CONSTRUCTION RECORD

NO.	DATE	DESCRIPTION

GRAPHIC SCALE

1" = 20'

LEGEND

1	LANDSCAPE BED: 18" TOPSOIL & MIN. 3" DEPTH ROCK MULCH, ROCK MULCH SIZE AND COLOR TO MATCH EXISTING (TYP)
2	LANDSCAPE SHOULDER (TYP)
3	SHRUB PLANTING (TYP)
4	PERENNIAL PLANTING (TYP)
5	PROTECTION FENCE (TYP)
6	TEMPORARY TREE PROTECTION FENCE (TYP)
7	EXISTING TREES TO REMAIN UNDISTURBED (TYP)
8	EXISTING PRUNUS VIRGINIANA SHUBERT SELECT TO BE RELOCATED
9	EXISTING PRUNUS VIRGINIANA SHUBERT SELECT TO REMAIN
10	EXISTING PRUNUS VIRGINIANA SHUBERT SELECT TO BE RELOCATED
11	EXISTING TREES TO REMAIN UNDISTURBED (TYP)
12	EXISTING TREES TO REMAIN UNDISTURBED (TYP)
13	EXISTING TREES TO REMAIN UNDISTURBED (TYP)
14	EXISTING TREES TO REMAIN UNDISTURBED (TYP)
15	EXISTING TREES TO REMAIN UNDISTURBED (TYP)
16	EXISTING TREES TO REMAIN UNDISTURBED (TYP)
17	EXISTING TREES TO REMAIN UNDISTURBED (TYP)
18	EXISTING TREES TO REMAIN UNDISTURBED (TYP)
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37	EXISTING TREES TO REMAIN UNDISTURBED (TYP)
38	EXISTING TREES TO REMAIN UNDISTURBED (TYP)
39	EXISTING TREES TO REMAIN UNDISTURBED (TYP)
40	EXISTING TREES TO REMAIN UNDISTURBED (TYP)

PROJECT INFORMATION

PUBLIC WORKS DEPARTMENT
 PROJECT MANAGEMENT AND ENGINEERING DIVISION
 AREA TRAFFIC CIRCULATION IMPROVEMENTS
 LANDSCAPE PLAN
 ACADEMY DRIVE 225+00 TO EPP
 HARTZELL ROAD

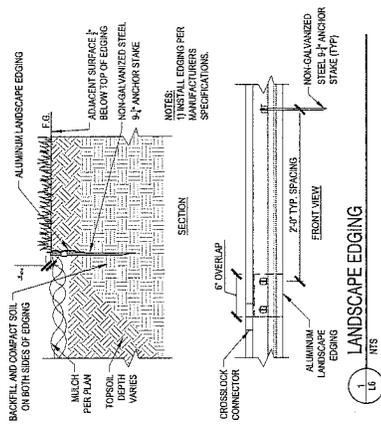
DATE: JUNE 2015
 SCALE: VER. N/A
 SHEET: 14 OF 16

CONSULTANT: BETTS/CORP/INCORPORATED
 49 TH STREET, SUITE 100
 WASHINGTON, DC 20004
 (202) 462-1100
 WWW.BETTS-CORP.COM

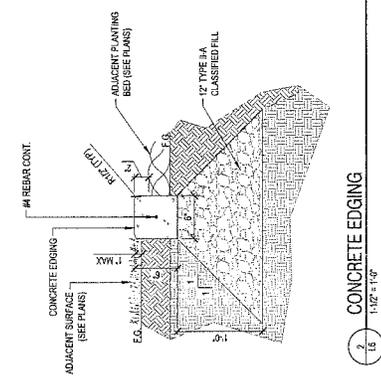
1. DATA PROVIDED BY: FIELD SURVEYOR. THESE RECORD DRAWINGS ARE A TRUE AND ACCURATE REPRESENTATION OF THE PROJECT AS SUBMITTED.

2. DATA TRANSFERRED BY: DATE: TITLE: COMPANY: FIELD SURVEYOR. THESE RECORD DRAWINGS ARE A TRUE AND ACCURATE REPRESENTATION OF THE PROJECT AS SUBMITTED.

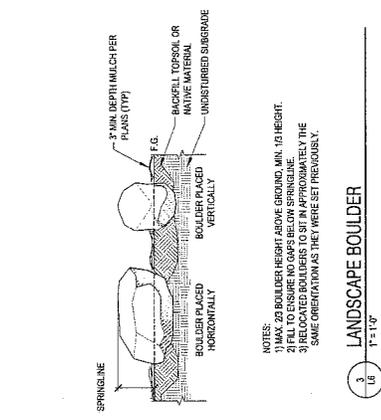
3. SHOWN ON THESE RECORD DRAWINGS IS THE PROJECT AS SUBMITTED. THE PROJECT AS CONSTRUCTED, DATA TRANSFERRED BY: DATE: TITLE: COMPANY: FIELD SURVEYOR. THESE RECORD DRAWINGS ARE A TRUE AND ACCURATE REPRESENTATION OF THE PROJECT AS SUBMITTED.



LANDSCAPE EDGING
1/8\"/>

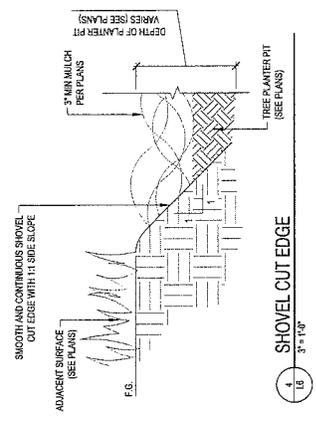


CONCRETE EDGING
1/8\"/>



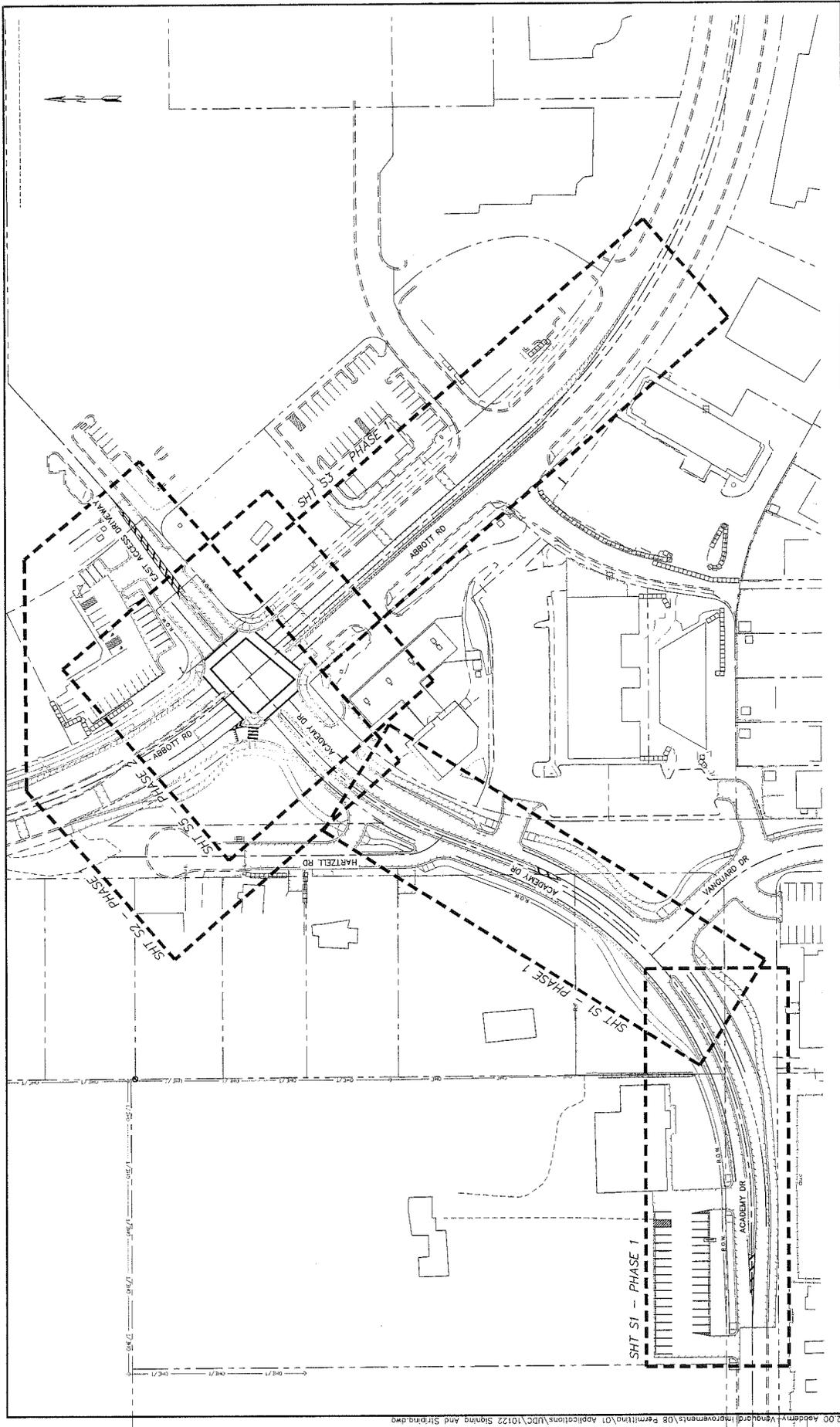
LANDSCAPE BOULDER
1/8\"/>

- NOTES:
- 1) MAX. 20\"/>



SHOVEL CUT EDGE
3/4\"/>

PUBLIC WORKS DEPARTMENT PROJECT MANAGEMENT AND ENGINEERING DIVISION 69-04 AREA TRAFFIC CIRCULATION IMPROVEMENTS LANDSCAPE DETAILS		STATE OF MASSACHUSETTS SEAL COMMONWEALTH OF MASSACHUSETTS REGISTERED PROFESSIONAL ENGINEER No. 10123 DATE: 08/20/2013 SCALE: 1/8" = 1'-0"
DRAWN (CHECKED) BY: [] DATE: [] CHECKED BY: [] DATE: [] SCALE: [] GRAPHIC SCALE: []		CONSULTANT: [] REVIEW: [] REVISIONS: []
RECORD DRAWING: [] FILE: [] THESE RECORD DRAWINGS ARE A TRUE AND ACCURATE REPRESENTATION OF THE PROJECT AS CONSTRUCTED.		CONTRACTOR: [] DATE: [] TITLE: []
DATA PROVIDED BY: [] BASED ON PERSONAL FIELD OBSERVATIONS BY THE DESIGNER OR AN AUTHORIZED REPRESENTATIVE OF THE DESIGNER AND ANY PHOTOGRAPHIC RECORDS AS CONDUCTED.		DATA TRANSFER CHECKED BY: [] DATE: [] COMPANY: []

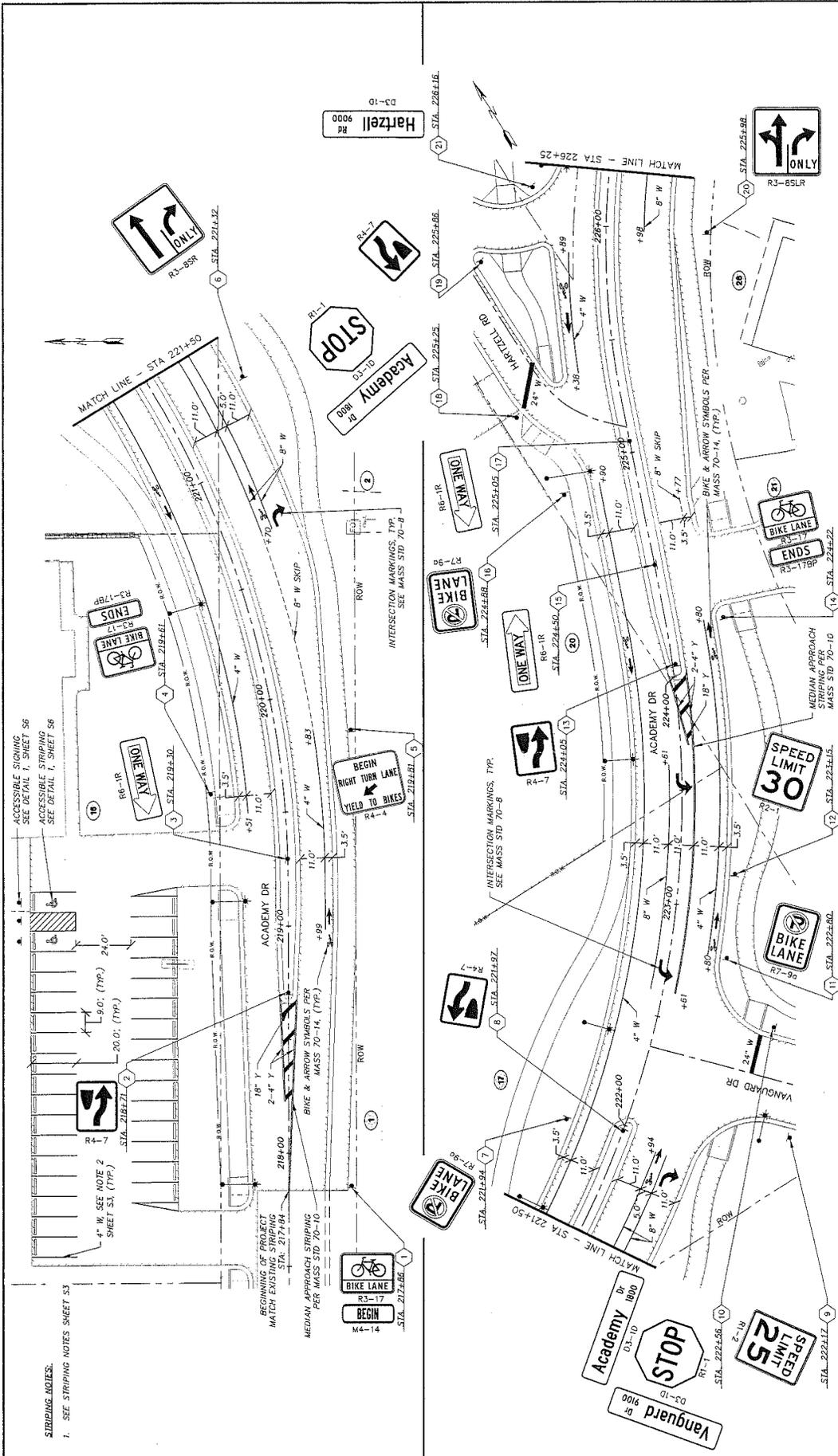


DATE: JUNE 2015
 SCALE: 1"=50'
 FIGURE: 1

ACADEMY DR / VANGUARD DR
 AREA TRAFFIC CIRCULATION IMPROVEMENTS
 SIGNING AND STRIPING KEY MAP



CRW
 ENGINEERS ARCHITECTS
 PROJECT: 101222.00
 STATUS: UDC



ACCESSIBLE SIGNING
SEE DETAIL 1, SHEET 56

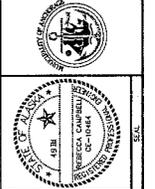
ACCESSIBLE STRIPING
SEE DETAIL 1, SHEET 56

STRIPING NOTES:
1. SEE STRIPING NOTES SHEET 53

RECORD DRAWING THIS DRAWING IS TO BE USED FOR RECORD PURPOSES ONLY. IT IS NOT TO BE USED FOR CONSTRUCTION. DATE: _____ BY: _____ CHECKED BY: _____ TITLE: _____		CONSTRUCTION RECORD DATE: _____ BY: _____ CHECKED BY: _____ TITLE: _____	
GRAPHIC SCALE 0 10 20 30 40 50 60 FEET PER INCH		CONSTRUCTION RECORD DATE: _____ BY: _____ CHECKED BY: _____ TITLE: _____	
DATE DATE: _____ BY: _____ CHECKED BY: _____ TITLE: _____		CONSTRUCTION RECORD DATE: _____ BY: _____ CHECKED BY: _____ TITLE: _____	
DATE DATE: _____ BY: _____ CHECKED BY: _____ TITLE: _____		CONSTRUCTION RECORD DATE: _____ BY: _____ CHECKED BY: _____ TITLE: _____	

PUBLIC WORKS DEPARTMENT
PROJECT MANAGEMENT AND ENGINEERING DIVISION
AREA TRAFFIC CIRCULATION IMPROVEMENTS
SIGNING AND STRIPING PHASE 1

SCALE: HOR. 1"=20' VERT. 1"=4' DATE: MAY 2015 DRAWING NO. 100-04-01



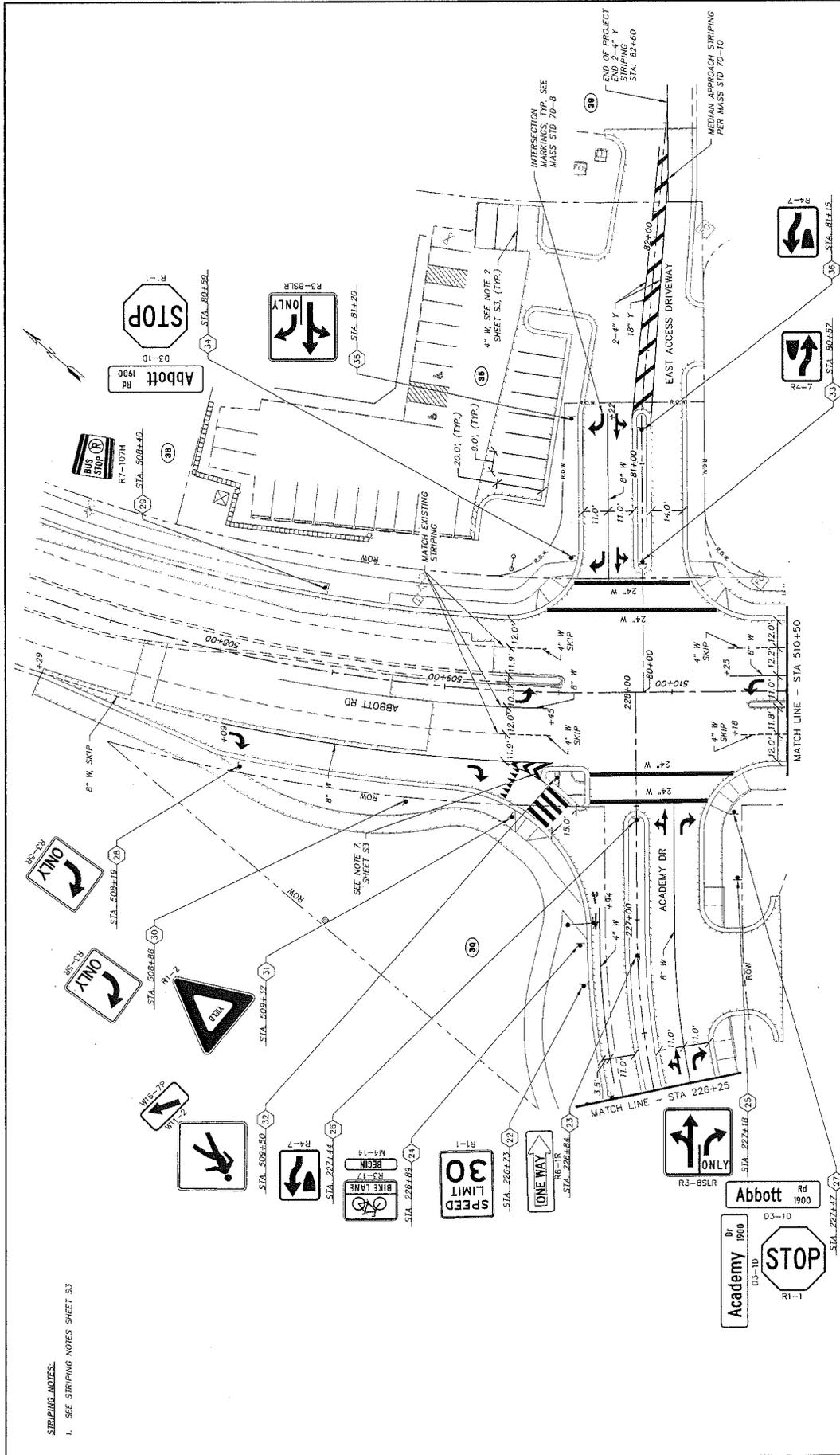
NO.	REVISION	DATE	BY	DESCRIPTION

CONTRACT NO. _____
 PROJECT NO. _____
 SHEET NO. _____

DATE: _____
 BY: _____
 CHECKED BY: _____
 TITLE: _____

DATE: _____
 BY: _____
 CHECKED BY: _____
 TITLE: _____

DATE: _____
 BY: _____
 CHECKED BY: _____
 TITLE: _____

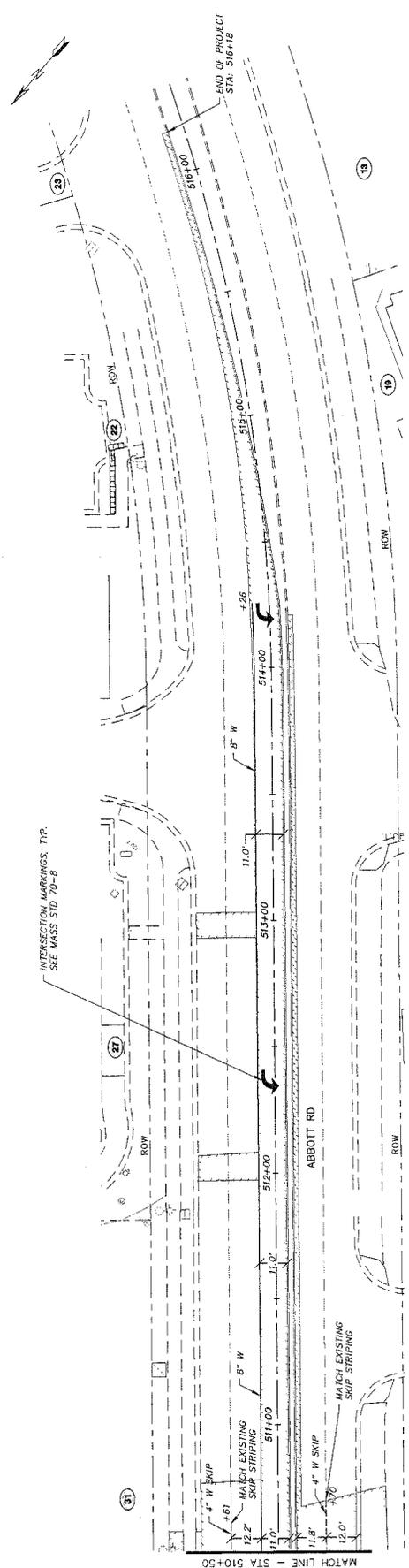


STRIPING NOTES:
 1. SEE STRIPING NOTES SHEET 53

RECORD DRAWING THIS DRAWING IS TO BE USED FOR RECORD PURPOSES ONLY. IT IS NOT TO BE USED FOR CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF ALL DATA AND REPRESENTATIONS. 1. DATA PROVIDED BY: _____ TITLE: _____ DATE: _____ 2. CONTRACTOR: _____ TITLE: _____ DATE: _____ 3. COMPANY: _____ TITLE: _____ DATE: _____ 4. BASED ON FIELD OBSERVATIONS BY THE ENGINEER (OR AN INDIVIDUAL UNDER HIS/HER DIRECT SUPERVISION) AND/OR PHOTOGRAPHIC DATA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF ALL DATA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF ALL DATA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF ALL DATA. 5. DATA TRANSFER CHECKED BY: _____ TITLE: _____ DATE: _____ 6. COMPANY: _____ TITLE: _____ DATE: _____ 7. MANUFACTURER: _____ TITLE: _____ DATE: _____		GRAPHIC SCALE 0 20 40 60 FEET 0 10 20 30 METERS	REVISIONS <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	NO.	DATE	DESCRIPTION									
NO.	DATE	DESCRIPTION													
PROJECT INFORMATION PROJECT NAME: _____ PROJECT NUMBER: _____ PROJECT LOCATION: _____ PROJECT DATE: _____ PROJECT SCALE: _____ PROJECT DRAWN BY: _____ PROJECT CHECKED BY: _____ PROJECT DATE: _____		CONTRACTOR CRW ENGINEERING GROUP LLC 1000 WASHINGTON STREET WASHINGTON, MA 01890 TEL: (978) 335-1111 FAX: (978) 335-1111	CONSULTANT STATE STREET ENGINEERS 100 STATE STREET WASHINGTON, MA 01890 TEL: (978) 335-1111 FAX: (978) 335-1111												
PUBLIC WORKS DEPARTMENT PROJECT MANAGEMENT AND ENGINEERING DIVISION AREA: TRAFFIC CIRCULATION IMPROVEMENTS SHEET: A SIGNING AND STRIPING PHASE 1 E. ACCESS ABBOTT RD. FROM STA. 226+25 TO 510+50 SCALE: 1" = 40' (PLAN) 1" = 20' (VERTICAL) DATE: MAY 2015 DRAWN BY: _____ CHECKED BY: _____ DATE: _____		DATE MAY 2015	SHEET 52 OF 56												

STRIPING NOTES

- UNLESS OTHERWISE NOTED, PROVIDE METHYL METHACRYLATE PAINT OF THE COLORS AND WIDTHS SPECIFIED FOR THE TRAFFIC MARKINGS INDICATED IN THE DRAWINGS. PROVIDE 250 MIL GROOVED-IN APPLICATION FOR ALL PAVEMENT MARKINGS.
- ALL PARKING LOT STRIPING SHALL BE 4" WHITE PAINT.
- INSTALL THE TWENTY-FOUR (24) INCH WIDE STOP BARS ACCORDING TO MASS STANDARD DETAILS 70-18 & 70-19.
- "W" REFERENCES WHITE MARKINGS AND "Y" REFERENCES YELLOW MARKINGS.
- ALL STRIPING SHALL CONFORM TO THESE CONTRACT DOCUMENTS AND THE STANDARD MASS DETAILS. ALL REVISIONS SHALL CONFORM TO THE LATEST EDITION OF THE ALASKA TRAFFIC MANUAL AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- DIMENSIONS REFERENCE CENTER OF STRIPE TO EDGE OF PAVEMENT.
- STRIPES THE INTERSECTION APPROACH ACCORDING TO MASS STANDARD DETAIL 70-8. STRIPES THE INTERSECTION APPROACH ACCORDING TO MASS STANDARD DETAIL 70-10. STRIPE THE MEDIUM APPROACH ACCORDING TO MASS STANDARD DETAIL 70-10. STRIPE THE RIGHT TURN LANE IN ACCORDANCE WITH MASS STANDARD DETAIL 70-11.



RECORD DRAWING 1. DATA PROVIDED BY: _____ TITLE: _____ DATE: _____ 2. DATA TRANSFERRED BY: _____ TITLE: _____ DATE: _____ 3. BASED ON PREVIOUS FIELD OBSERVATIONS BY THE ENGINEER OR AN INDIVIDUAL UNDER HIS/HER DIRECT SUPERVISION AND THE DATA PROVIDED BY THE CONTRACTOR. THIS DRAWING IS APPROVED FOR DATA TRANSFER DECIDED BY: _____ TITLE: _____ DATE: _____ COMPANY: _____		FIELD CHECKS CONTRACTOR: _____ DATE: _____ BY: _____ CHECKED BY: _____ DATE: _____		CONSTRUCTION RECORD FIELD BOOKS: _____ LOCATION: _____ DATE: _____ SCALE: _____ SHEET NO. _____ OF _____		CONSULTANT CRW ENGINEERING GROUP, INC. 1000 W. 10TH AVENUE, SUITE 100 DENVER, CO 80202 TEL: (303) 733-1217 FAX: (303) 733-1217		 DAVID J. SMITH PROFESSIONAL ENGINEER STATE OF COLORADO NO. 10000		PROJECT INFORMATION PUBLIC WORKS DEPARTMENT PROJECT MANAGEMENT AND ENGINEERING DIVISION PROJECT NO. 09-04 AREA: TRAFFIC CIRCULATION IMPROVEMENTS SCHED. A SIGNING AND STRIPING PHASE 1 ABBOTT ROAD 510+50 TO EOP DATE: MAY 2015 SHEET 53 OF 56	
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MUNICIPALITY OF ANCHORAGE



Community Development Department

Phone: 907-343-7931

Fax: 907-343-7927

Mayor Dan Sullivan

Title 21 Code Selection

For review and approval of my project, Academy Drive/ Vanguard Drive Area Traffic Circulation Improvements, Brayton Drive to Abbott Road,
I choose to be regulated by:

- "Old" Title 21 (expires December 31, 2014)
- "New" Title 21 (becomes effective January 1, 2014)

I understand that my application will be reviewed and acted on using the provisions of the code version I have selected, and that this selection is final.*

Mark Kimerer

6/5/2015

Signature of Petitioner or Petitioner's Representative

Date

Mark Kimerer

Printed Name

*Should the petitioner wish to switch the applicable version of code at any time after this form is submitted, a new application is required and new application fees will be assessed. The case will then be scheduled as a new application in accordance with the cut-off date schedule.

For office use only:

2015-0067

Permit/Case Number

10/1/13

MUNICIPALITY OF ANCHORAGE



Public Works Department
Project Management and Engineering Division
4700 Elmore Road

Ph: 907.343.8135
Fax: 907.343.8088

Mayor Dan Sullivan

June 5, 2015

Municipality of Anchorage
Planning Department
4700 Elmore Road
Anchorage, AK 99519-6650

RE: Agency Authorization
Academy Drive / Vanguard Drive Area Traffic Circulation
Improvements
Brayton Drive to Abbott Road
MOA PM&E No. 09-04

The Project Management & Engineering Division (PM&E) hereby authorizes Bettisworth North, acting as a subconsultant through CRW Engineering Group, to act as PM&E's agent as regards the Academy Drive / Vanguard Drive Area Traffic Circulation Improvements project. Please do not hesitate to contact Mark Kimerer at Bettisworth North, or Bill Johnson at CRW Engineering Group, with any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "S. Gillette".

Steven B. Gillette, P.E.
Project Manager
PM&E

cc: Duane Maney, Project Administrator
09-04 CS