



Sherry Garrison, Council Position 1
TJ Haight, Council Position 2
Tommy Ginn, Council Position 3

Bill Patterson, Council Position 4
Ron Martin, Council Position 5
Rae A. Sinor, Council Position 6

James Stokes, City Manager
Gary Jackson, Assistant City Manager

Jerry Mouton Jr., Mayor

Shannon Bennett, City Secretary
Jim Fox, City Attorney

In order to help prevent the spread of the virus that causes COVID-19, the City of Deer Park is asking members of the public attending the meeting to:

- 1. Maintain at least 6 feet separation from other individuals.*
- 2. Self-screen before going into the meeting for any of the following new or worsening signs or symptoms of possible COVID-19: (Cough, Shortness of breath or difficulty breathing, Chills, Repeated shaking with chills, Muscle pain, Headache, Sore throat, Loss of taste or smell, Diarrhea, Feeling feverish or a measured temperature greater than or equal to 100.0 degrees Fahrenheit, Known close contact with a person who is lab confirmed to have COVID-19, Wash or disinfect hands upon entering the building and after any interaction with others in the building.*
- 3. Consider wearing cloth face coverings (over the nose and mouth) when entering the building, or when within 6 feet of another person who is not a member of the individual's household.*

The City of Deer Park will be limiting attendance in the Council Chambers to seventy five percent (75%) of the total listed occupancy of room capacity during this meeting.

CALL TO ORDER

COMMENTS FROM AUDIENCE

1. Annual update on activities of the South East Texas Housing Finance Corporation and the Deer Park Housing Market from Troy Cothran.

[RPT 21-015](#)

Recommended Action: Discussion Only in Workshop

Department: City Council

The Mission of the City of Deer Park is to deliver exemplary municipal services that provide the community a high quality of life consistent with our history, culture and unique character.

2. Discussion of issues relating to entering into an agreement for architectural services with the architectural firm PGAL for design of the Deer Park Emergency Operation Center addition, reconfiguration of the existing EOC and Dispatch Center as well as the expansion of the Records Unit at the Deer Park Police Department.

[DIS 21-007](#)

Recommended Action: Discussion only.

Department: Public Works

Attachments: [Council Presentation - 12-15-2020](#)

[2020-2021 CCPD budget](#)

[Conceptual Design Narrative - 08-21-2020 - corrected](#)

[PGAL – Architectural Services Agreement – 03-31-2020 - \\$384,525](#)

ADJOURN

Shannon Bennett, TRMC
City Secretary

Posted on Bulletin Board
April 1, 2021

City Hall is wheelchair accessible and accessible parking spaces are available. Hearing assistance devices are available. Requests for accommodation services must be made 72 hours prior to any meeting. Please contact the City Secretary's office at 281-478-7248 for further information.

The Mission of the City of Deer Park is to deliver exemplary municipal services that provide the community a high quality of life consistent with our history, culture and unique character.



Legislation Details (With Text)

File #:	RPT 21-015	Version:	1	Name:	
Type:	Report	Status:		Agenda Ready	
File created:	3/8/2021	In control:		City Council Workshop	
On agenda:	4/6/2021	Final action:			
Title:	Annual update on activities of the South East Texas Housing Finance Corporation and the Deer Park Housing Market from Troy Cothran.				
Sponsors:	City Council				
Indexes:					
Code sections:					
Attachments:					

Date	Ver.	Action By	Action	Result
4/6/2021	1	City Council Workshop		

Annual update on activities of the South East Texas Housing Finance Corporation and the Deer Park Housing Market from Troy Cothran.

Summary:

The South East Texas Housing Finance Corporation (SETH) exists to assist individuals in purchasing homes, senior housing and workforce housing. The Corporation offers home buyer education classes, grants to assist with down payment and closing costs, mortgage credit assistance programs, etc. SETH is governed by a Board of Directors comprised of appointees from municipalities and counties throughout South East Texas, including Deer Park.

For many years, Mr. Troy Cothran has been the City of Deer Park's representative to the SETH Board of Directors. He currently serves as President & Chairman of the Board after being re-appointed to this position by the Deer Park City Council in March 2020. Mr. Cothran attends City Council meetings annually to provide an update on the activities of SETH and the housing market in Deer Park. A copy of the 2020 SETH Annual Report is attached.

Fiscal/Budgetary Impact:

N/A

Discussion Only in Workshop



Legislation Details (With Text)

File #:	DIS 21-007	Version:	1	Name:	
Type:	Discussion	Status:		Agenda Ready	
File created:	1/14/2021	In control:		City Council Workshop	
On agenda:	4/6/2021	Final action:			
Title:	Discussion of issues relating to entering into an agreement for architectural services with the architectural firm PGAL for design of the Deer Park Emergency Operation Center addition, reconfiguration of the existing EOC and Dispatch Center as well as the expansion of the Records Unit at the Deer Park Police Department.				
Sponsors:	Public Works				
Indexes:	Public Safety				
Code sections:					
Attachments:	Council Presentation - 12-15-2020 2020-2021 CCPD budget Conceptual Design Narrative - 08-21-2020 - corrected PGAL – Architectural Services Agreement – 03-31-2020 - \$384,525				

Date	Ver.	Action By	Action	Result
4/6/2021	1	City Council Workshop		

Discussion of issues relating to entering into an agreement for architectural services with the architectural firm PGAL for design of the Deer Park Emergency Operation Center addition, reconfiguration of the existing EOC and Dispatch Center as well as the expansion of the Records Unit at the Deer Park Police Department.

Summary:

The City of Deer Park has worked with PGAL as recently as 2019 on the new EMS Station at 1700 East Boulevard. We had significant success, and lessons learned, with them from that project, and believe that their guidance, communication and cooperation with City Staff continues to give us significant confidence to work with them again and enter into an agreement for architectural services for design, at the Deer Park Police Department, of the:

1. Deer Park Emergency Operation Center addition,
2. reconfiguration of the existing EOC and Dispatch Center
3. expansion of the Records unit

January 06, 2020

The due date in which the City received Statements of Qualifications (SOQs) from architectural firms

pursuant to a Request for Qualifications (RFQ) for Architectural Services for programming and master planning of the Deer Park Emergency Operation Center addition, reconfiguration of the existing EOC and Dispatch Center as well as the expansion of the Records unit at the Deer Park Police Department.

This solicitation was pursuant to the Texas Professional Services Procurement Act, which regulates the procurement professional services including engineering, architectural services and land surveying, etc. The most highly qualified provider was selected on the basis of demonstrated competence and qualifications.

January 20, 2020

CCPD was updated on the Request for Qualifications (RFQ) for Architectural Services.

File #: DIS 20-013 ([link <https://cityofdeerpark.legistar.com/LegislationDetail.aspx?ID=4308990&GUID=B4790BC2-AF7F-4137-B3C9-16C60ECE4317&FullText=1>](https://cityofdeerpark.legistar.com/LegislationDetail.aspx?ID=4308990&GUID=B4790BC2-AF7F-4137-B3C9-16C60ECE4317&FullText=1))

March 02, 2020

At the Crime Control and Prevention District (CCPD) Board of Directors meeting Staff recommended entering into an agreement with PGAL.

File #: ACT 20-006 ([link <https://cityofdeerpark.legistar.com/LegislationDetail.aspx?ID=4341456&GUID=832CEB38-659C-4749-8FCA-DDE942B8AE96>](https://cityofdeerpark.legistar.com/LegislationDetail.aspx?ID=4341456&GUID=832CEB38-659C-4749-8FCA-DDE942B8AE96))

March 03, 2020

Same recommendation made by CCPD on March 02, 2020 was presented to City Council and accepted.

File #: ACT 20-007 ([link <https://cityofdeerpark.legistar.com/LegislationDetail.aspx?ID=4341457&GUID=71EC3C62-0E11-4E68-819C-F0468D75E3C0&FullText=1>](https://cityofdeerpark.legistar.com/LegislationDetail.aspx?ID=4341457&GUID=71EC3C62-0E11-4E68-819C-F0468D75E3C0&FullText=1))

December 15, 2020

A presentation by PGAL with supplementary information and presentation provided by City Staff. The presentation consisted of preliminary architecture designs and cost analysis by PGAL.

The presentation consisted of:

1. **PGAL** - Architectural renderings of the proposed new EOC and improvements to the existing EOC and adjacent dispatch and records areas,
2. **PGAL** - Estimated Detailed Cost Estimate by Halford Busby, with review by PGAL and guidance by the City of Deer Park Police Department and Administrative Staff, and
3. **City Staff** - Estimated cost estimates by City of Deer Park - Information Technology Director James Lewis for necessary equipment upgrades to existing Police Department Station.

File #: ACT 20-042 ([link <https://cityofdeerpark.legistar.com/LegislationDetail.aspx?ID=4732269&GUID=7FA7F174-3BF3-4A19-BFB1-373E34FCE209&FullText=1>](https://cityofdeerpark.legistar.com/LegislationDetail.aspx?ID=4732269&GUID=7FA7F174-3BF3-4A19-BFB1-373E34FCE209&FullText=1))

January 13, 2021

On January 13, 2021, City Staff received a proposal from PGAL. Staff is in the process of negotiating fees and the agreement with PGAL at this time.

January 18, 2021

At the Crime Control and Prevention District (CCPD) Board of Directors meeting, Staff is requesting the Board's approval to continue negotiations with PGAL regarding architectural service agreement and fees, and authorization to recommend a final negotiated agreement to City Council for approval and execution.

February / March 2021

City of Deer Park Staff continues to negotiate with PGAL in regards to scope of project. In order to unify communication and control systems under single umbrella of control, Ferguson Consulting Engineering will be sub-contracted under PGAL to assist with jail controls, camera, radio, and other systems integrations where City IT Department was previously performing this activity.

Agreement on cost and scope was reached between City of Deer Park Staff and PGAL with agreement attached for review.

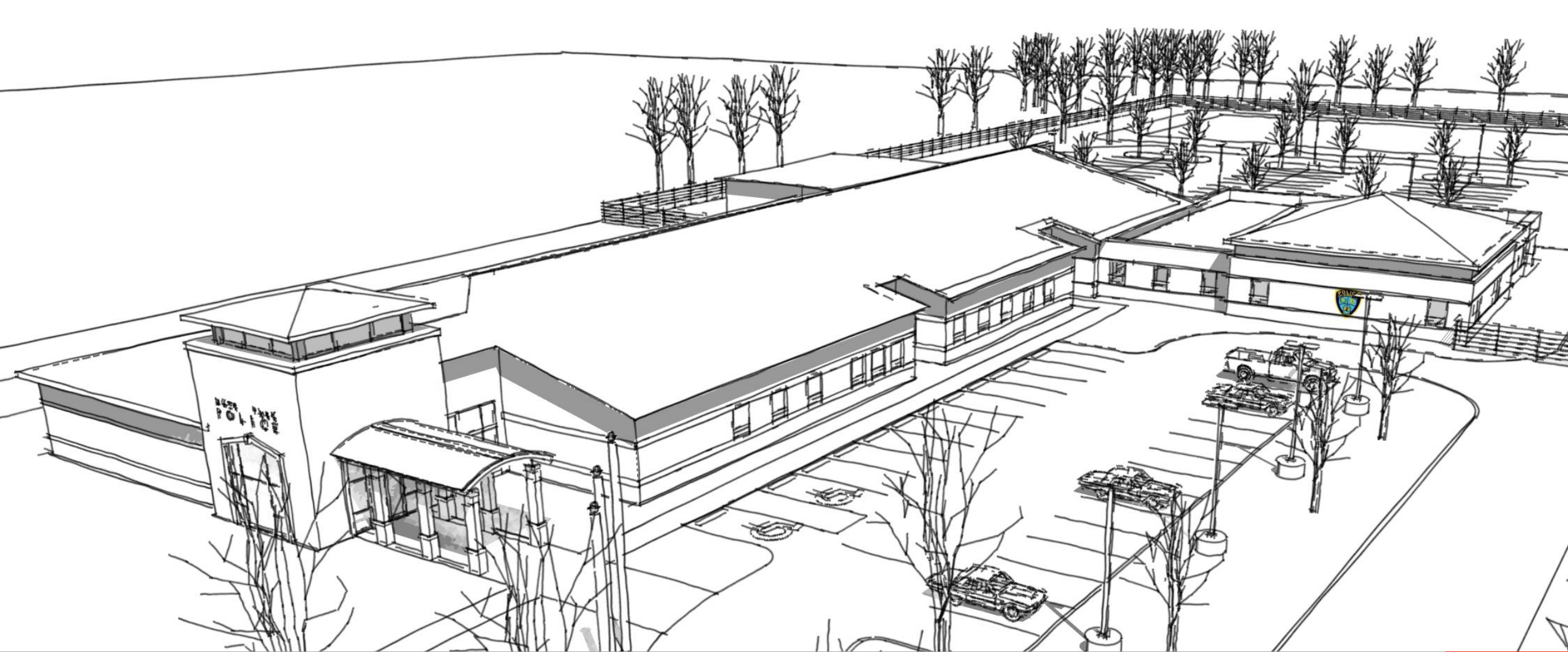
Attached for your reference are:

1. PGAL - Conceptual design narrative - 08-21-2020
2. PGAL - Architectural renderings and Council Presentation - 12-11-2020
3. PGAL - Architectural Services Agreement - 03-31-2020 - \$384,525 (+ not-to-exceed \$5,000 in reimbursable expenses).
4. 2020 - 2021 - CCPD Budget

Fiscal/Budgetary Impact:

Discussion only.

Discussion only.

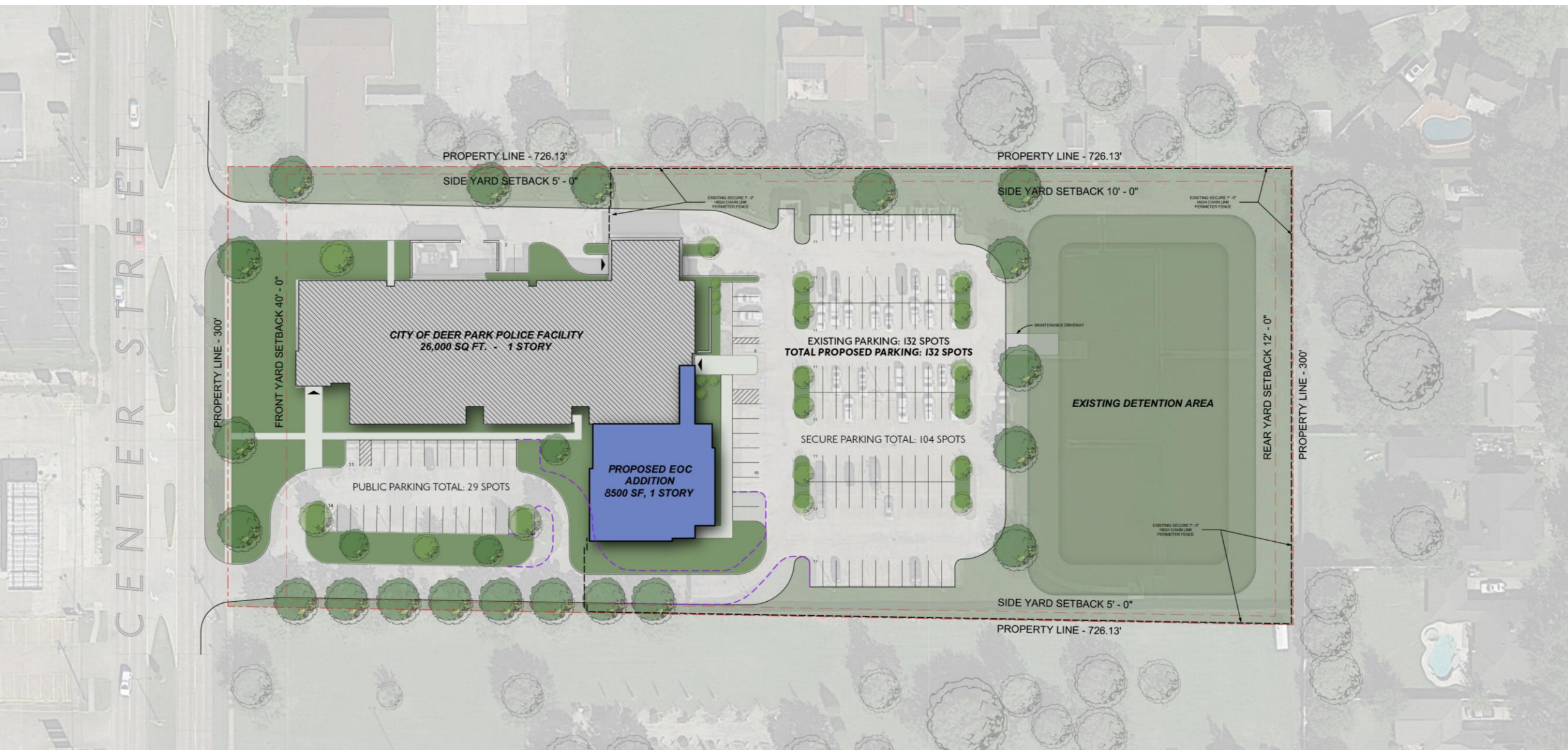


DEER PARK POLICE DEPARTMENT EOC ADDITION + RENOVATION

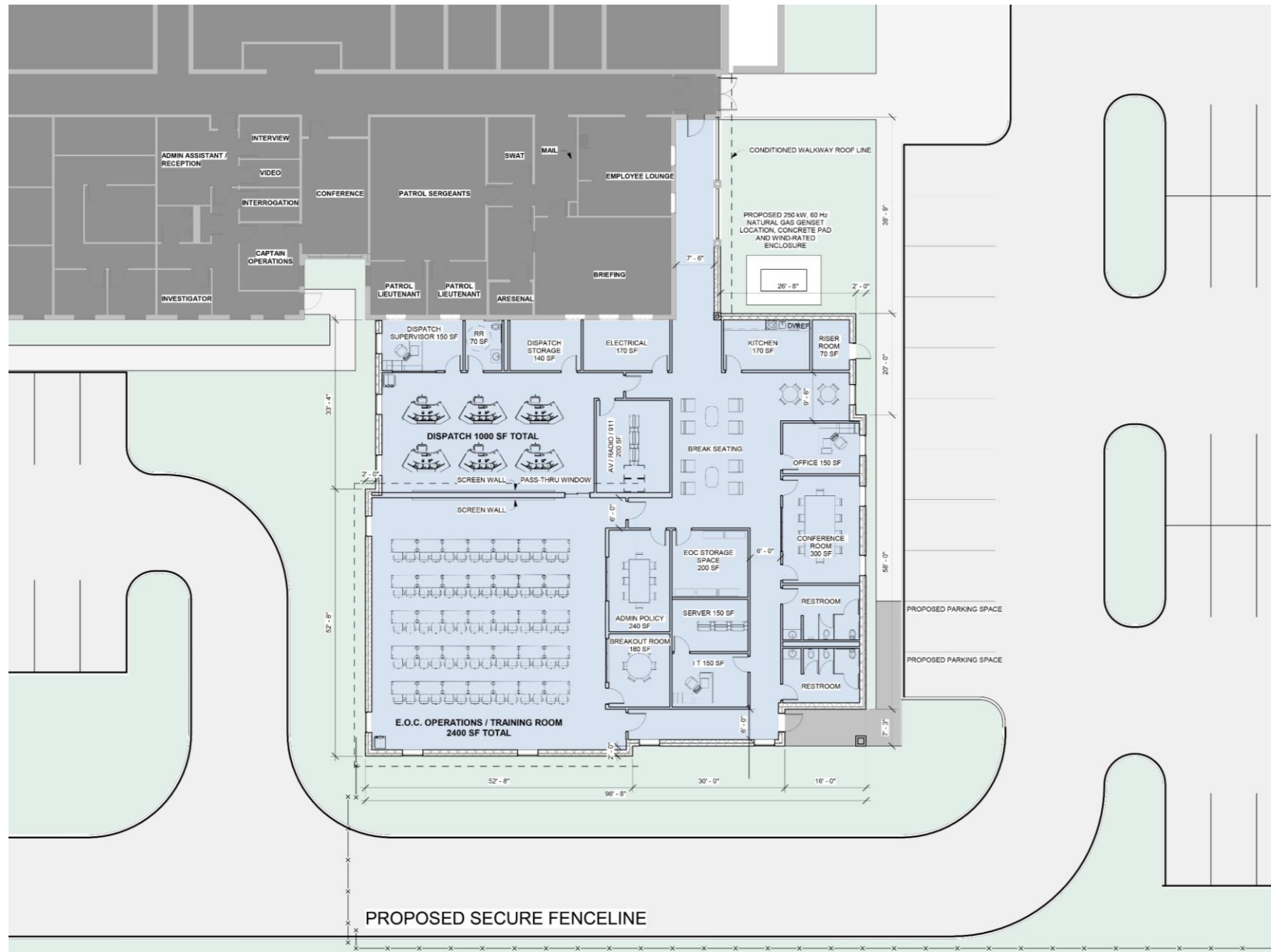
Joint City Council and Crime Prevention District Workshop – December 15, 2020



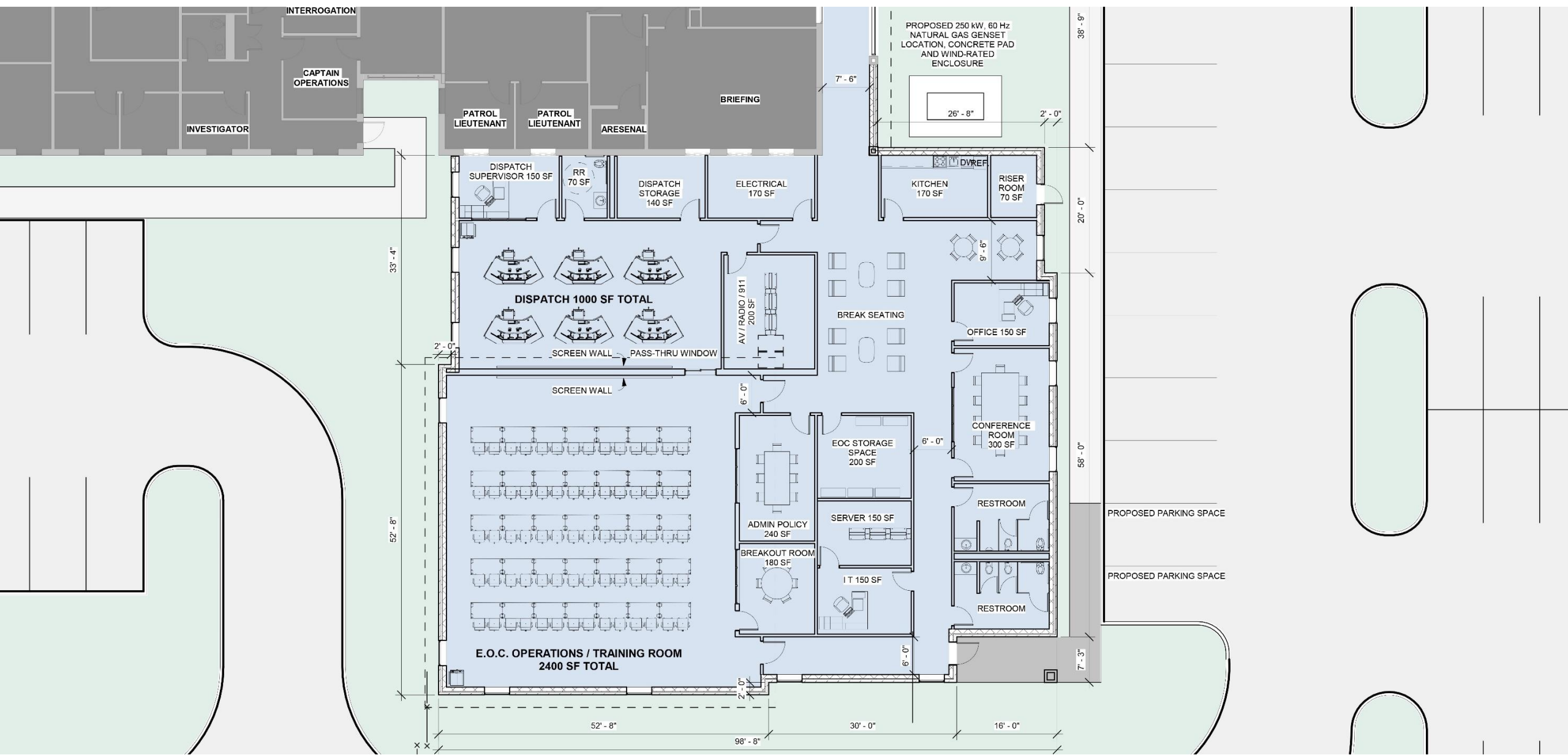
OVERALL SITE PLAN



PGAL



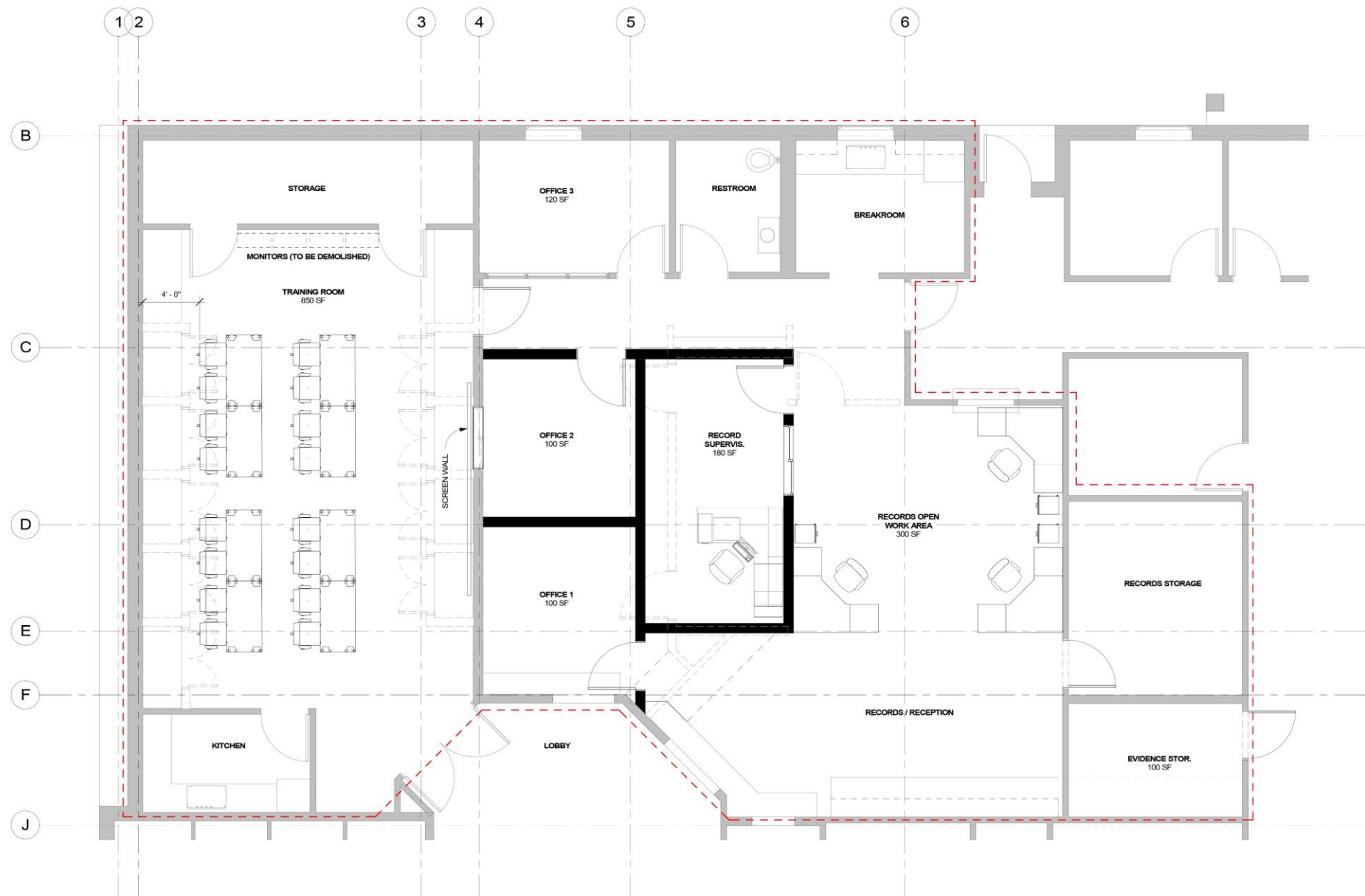
EOC EXPANSION



EXISTING PD RENOVATION



ENLARGED RENOVATION PLAN



EXISTING ENTRY PERSPECTIVE



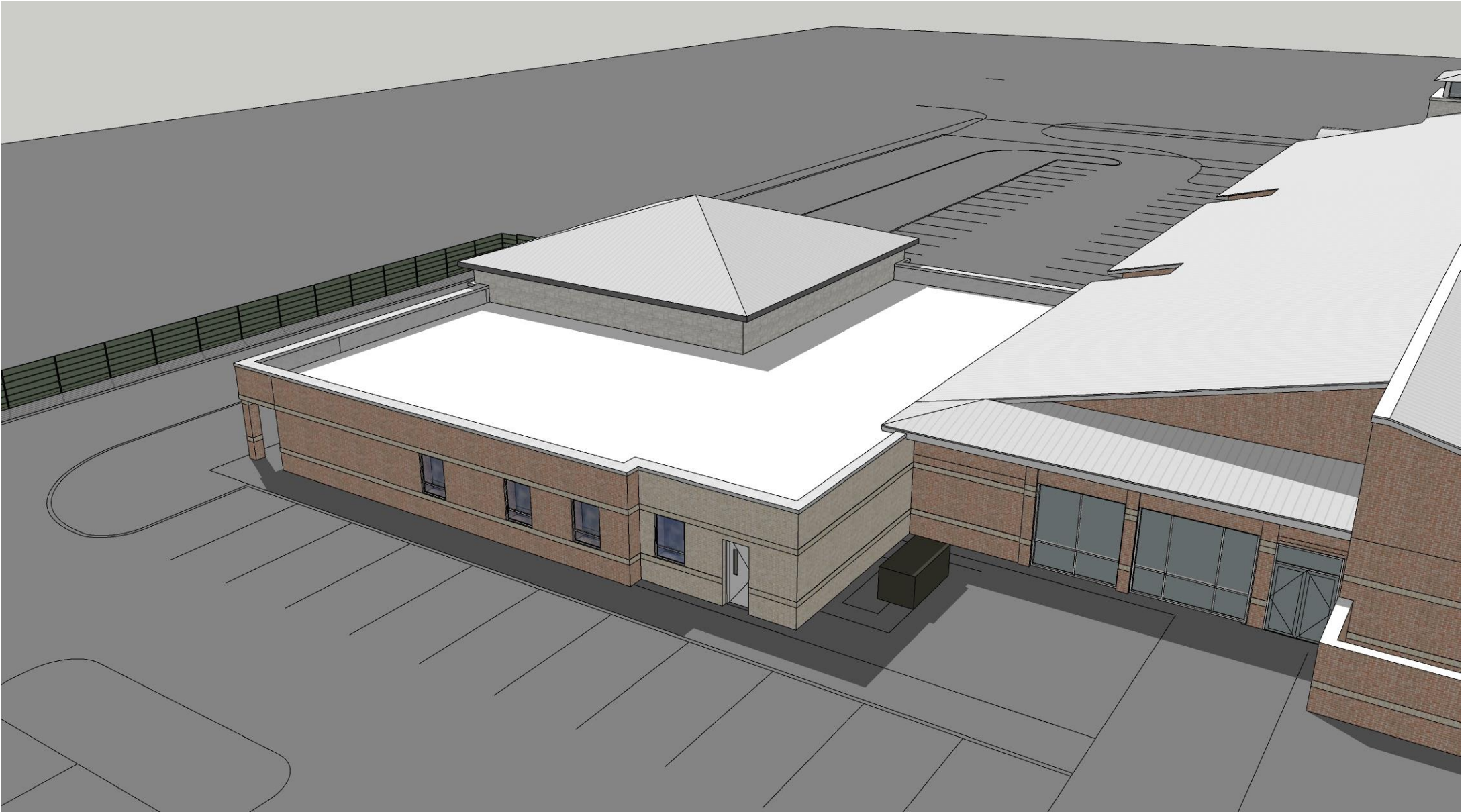
EXPANSION PERSPECTIVE



OVERALL PERSPECTIVE



EXPANSION PERSPECTIVE



CONCEPTUAL BUDGET ESTIMATE

CONSTRUCTION COST	\$ 3,270,105	
SOFT COSTS	\$ 327,000	
DISPATCH CONSOLES	\$ 130,000	} → \$ 665,000
MOTOROLA CONSOLES	\$ 290,000	
FF&E	\$ 245,000	
CONTINGENCY	\$ 327,000	TOTAL WITHOUT FF&E
TOTAL PROJECT COST	\$ 4,589,105	\$ 3,924,105

EXISTING FACILITY RENOVATION COSTS

JAIL AUTOMATED ACCESS SYSTEM	\$ 150,000
ACCESS CONTROL / CAMERA SYSTEM REPLACEMENT	\$ 139,000
CELL PHONE BOOSTER	\$ 2,000
CABLE NETWORK SYSTEM	\$ 4,500
ROOM TECHNOLOGY	\$ 9,000
EXISTING FACILITY SUBTOTAL	\$ 304,500
 TOTAL PROJECT COST	 \$ 4,893,605

PROPOSED DESIGN AND CONSTRUCTION SCHEDULE

PRESENTATION TO CCPD / COUNCIL	12/15/2020
CCPD MEETING / AUTHORIZATION	1/18/2021
COUNCIL MEETING / AUTHORIZATION	1/19/2021
PGAL DESIGN START	1/20/2021
RECEIVE BIDS	5/20/2021
AWARD BID	7/6/2021
NTP	8/20/2021
CONSTRUCTION	9/4/2021 – 7/1/2022

CITY OF DEER PARK
2020 - 2021 CRIME CONTROL DISTRICT BUDGET

Account
#

41000			
-	PERSONNEL & RELATED	BUDGET:	773,770.00
41010	Salaries - Full Time		526,601.00

41000's	Benefits		202,169.00
	Pension/OPEB Expense		10,000.00

41040	Overtime		35,000.00
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PERSONNEL BALANCE	\$773,770.00
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42000			
-	SERVICES	BUDGET:	164,031.00

42310	Equipment Rental		28,800.00
	Six Rental Vehicles for Pro-Act & Investigations	28,800.00	
42390	Annual Audit		2,000.00
42500	Training		5,000.00
	Roadside Inspection & Weight Enforcement Training Complete	5,000.00	
42520	Dues & Fees		11,308.00
	Vehicle Registrations for PD Fleet	708.00	
	Leads on Line	4,748.00	
	Lexis Nexus (Accurant)	5,852.00	
42790	Software - Other		98,470.00
	OSSI Agency Licensing Fee (RMS)	47,795.00	
	OSSI Consortium Fee	30,441.00	
	Cellebrite UFED Annual License		
	Renewal Complete	3,999.00	
	Extended Warranty for Dispatch Equipment Complete	13,635.00	
	IA Pro & Blue Team software maintenance Complete	2,000.00	
	Cellular service for ProAct Covert Camera Modem	600.00	
42900	Contract Labor		18,453.00
	ERAD Enterprise Service - Fraud Detection	6,000.00	
	Specialized Counsel, Search Warrants, Subpoenas	10,000.00	
	Move furniture to paint Patrol Supervisor's Office Complete	2,453.00	

SERVICES BALANCE	\$164,031.00
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43000			
-	SUPPLIES	BUDGET:	176,180.00
43050	Election equipment, supplies & staffing		0.00
43070	Postage		327.00
43080	Small tools & Minor Equipment		\$173,128.00
	AED's & trauma kit supplies for 5 patrol Tahoes	7,090.00	
	Airlink modems for 5 patrol Tahoes	8,850.00	
	DataLux Tracer systems, DL Swipes & Printers (5)	30,661.00	
	Equipment build out for 5 new patrol Tahoes	77,275.00	
	Equipment for 2 DOT Enforcement Vehicles	1,500.00	
	I.D Printer for Admin Office Complete	2,000.00	
	Plastix Plus Consoles & Organizers for 5 patrol veh.	14,010.00	
	ProLaser III Radars w.2yr warranty (2)	5,400.00	
	Replacement parts for Crossing Guard radios	837.00	
	Covert Camera for ProAct Complete	2,490.00	
	SWAT Equipment	16,995.00	
	SWAT Tripod shooting rest	1,010.00	
	Tool chest/cabinet for armor supplies at firing range Complete	1,500.00	
	Track Xtreme GPS Tracing Device w/1yr access Complete	1,000.00	
	Vericom V-sense Brake Meter		
	Computer	1,750.00	
	Vortex Crossfire HD Binoculars for ProAct Complete	760.00	
43140	Protective Clothing		\$2,725.00
	Rifle vests for new officers (3)	2,725.00	
	SUPPLIES BALANCE		\$176,180.00
44000 -	Maintenance	BUDGET:	49,462.00
44020	Equipment Maintenance		\$5,130.00
	Datalux Tracer Maintenance	1,500.00	
	2 Year Warranty for DVD Burner Robot	3,630.00	
44040	Building Maintenance		\$13,387.00
	Paint interior walls of the PD hall way		
	Complete	6,400.00	
	Paint interior walls of the Sgt. Office		
	Complete	2,719.00	
	Replace carpet in Patrol Sgt. Office		
	Complete	4,268.00	
44120	Grounds Maintenance		\$30,945.00
	Grounds maintenance for Firing Range	30,000.00	
	Re-strip parking spaces & fire lanes at the range Complete	945.00	
			\$49,462.00
49000			
-	CAPITAL OUTLAY	BUDGET:	4,448,066.00
49020	Building		4,036,285.00
	Awning for Emergency Generator	5,499.00	
	Building covers and storage at the Firing Range	150,000.00	

	EOC Construction	3,500,000.00	
	EOC Final Structural Design	240,000.00	
	EOC Programming Conceptual Phase		
	Complete	30,000.00	
	Install Backflow Preventer in PD Mechanical Room Complete	7,770.00	
	Metal Roof & Downspout Restoration	103,016.00	
49040	Specialized Equipment		112,723.00
	WatchGuard In-Car Video System (5)	45,763.00	
	Replace Fire Alarm Control Panel in EOC	8,000.00	
	Emergency Generator Restoration	15,000.00	
	Haenni WL101 Wheel Load Scales for DOT Enforcement (8)	43,960.00	
49060	Vehicles		299,058.00
	Patrol Tahoes (5)	214,198.00	
	28' Self Contained Mobile Command Post	84,860.00	
49080	OSSI Fees		0.00
	OSSI Enterprise Fund	0.00	
	OSSI System Licensing Fees	0.00	
CAPITAL OUTLAY BALANCE			\$4,448,066.00
TOTAL REMAINING BALANCE			\$5,611,509.00
BUDGETED EXPENDITURES			5,611,509.00

YELLOW HIGHLIGHTS INDICATE PROJECTED PURCHASES SECOND QUARTER



Deer Park Police Department Renovation and EOC Expansion Deer Park, Texas

PGAL Project No.: 1005223

Conceptual Design Narrative

August 21, 2020



City of Deer Park
Owner

I.A. Naman and Associates inc.
MEP Engineer

Ferguson Consulting
Telecom/Security/Av Consultant

PGAL
Architect/Civil

Henderson Rogers
Structural Engineer

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PROJECT DESCRIPTION

The existing City of Deer Park – Police Station is located at: 2911 Center Street, Deer Park, Texas, 77536. The current Police Station is approximately 30,000 sq. ft. and is utilized for typical Law Enforcement activities. The facility consists of areas including restrooms, breakrooms, reception, open and enclosed porticos, restricted access areas, jail cells, offices, dispatch, and mechanical, electrical and plumbing closets. A public parking lot is located on the southwest side, and secure restricted access parking on the east side of the station.

The City of Deer Park is interested in updating the existing Police station. The updates to the Police station will include:

A new 7500 sf. multi-use single story building addition to predominately serve as a relocation of the existing Emergency Operation Center (EOC) and Dispatch Center, as well as the redesign and reuse of the existing EOC, Dispatch Center, Radio Equipment room and Records/Reception offices.

EXPANSION – BUILDING EXTERIOR

The single-story building expansion is a steel framed structure. The expansion itself will be connected to the existing exterior masonry wall and connected to a secure entry via a conditioned corridor. The roof will consist of both low sloped parapet style roofing and sloped standing seam metal roofing. Areas of low sloped roof deck will contain internal drains to an interior piped drainage system. The drain system will also accommodate and serve areas of the existing roof at points of connection to the new expansion

- The exterior wall material is a masonry veneer (to match existing brick Veneer). The exterior wall assembly will be composed of the brick veneer, 1" airspace, 2" rigid insulation, over fluid applied water proofing, over 7-5/8" CMU, developing an R value of 19 for the exterior wall.
- The window systems are to consist of a prefinished aluminum storefront system (Kynar coating to match existing). The glass for the new facility will be 1 5/16" impact-resistant insulating glass with a low-e coating (tinting to match existing).
- The roof for low slope areas will be a 4-ply SBS Modified Bitumen system over tapered rigid insulation (Minimum R-23). The system is to be compliant with all design and uplift tests as required for the region
- The roof for pitched areas will be a prefinished standing seam metal roof over ice and water shield over 7/16" nailer board over rigid insulation (Minimum R-23). The system is to be compliant with all design and uplift tests as required for the region

EXPANSION - BUILDING INTERIOR

The single-story building expansion is to contain the following Primary interior spaces. EOC, Dispatch, Admin Spaces, Break areas, Conditioned Connector Corridor, and associated support spaces

Primary Space

- The connector corridor for the building will consist of the following materials: Luxury Vinyl Plank flooring with a rubber base, painted gypsum board walls, 2'x2' exposed tee acoustical tile ceiling, direct/indirect LED lighting.
- The Break area will consist of the following materials: Luxury Vinyl Plank flooring with a rubber base, painted gypsum board walls, 2'x2' exposed tee acoustical tile ceiling, direct/indirect LED lighting.
- The EOC space will be a double height space with raised access flooring for electrical and data pathways and will consist of the following materials: carpet flooring and rubber base painted gypsum board walls, 2'x2' exposed tee acoustical tile ceiling, direct/indirect LED lighting.
- The Dispatch space will have access flooring for electrical and data pathways and will consist of the following materials: carpet flooring and rubber base painted gypsum board walls, 2'x2' exposed tee acoustical tile ceiling, direct/indirect LED lighting.
- Administrative Spaces will consist of the following materials: carpet flooring and rubber base, painted gypsum board walls, 2'x2' exposed tee acoustical tile ceiling, direct/indirect LED lighting.

Support Space

- The Restrooms will consist of the following materials: Porcelain tile floor and base, porcelain tile walls full height at wet walls and epoxy paint gypsum board walls and ceiling with compact fluorescent downlight and wall sconce
- The Janitor space will consist of the following materials: Sealed concrete floor, painted gypsum board walls and exposed structure ceiling.
- The Storage will consist of the following materials: VCT flooring and rubber base, painted gypsum board walls, 2'x2' exposed tee acoustical tile ceiling.
- The Mechanical/Electrical/Janitor spaces will consist of the following materials: Sealed concrete floor and rubber base, painted gypsum board walls and exposed structure ceiling.
- The IT Closet will consist of the following materials: Sealed concrete floor and rubber base, painted treated plywood over gypsum board and exposed structure ceiling.

EXISTING PD RENOVATION - BUILDING INTERIOR

The interior portion of the existing PD will be renovated as some of the function are being relocated into the new expansion. The following existing interior spaces will require renovation:
Dispatch, EOC, and Records

- The existing EOC will be expanded into a training space and will consist of the following

materials, carpet flooring and rubber base painted gypsum board walls, 2'x2' exposed tee acoustical tile ceiling, direct/indirect LED lighting.

- The existing Dispatch will be expanded into office space and will consist of the following materials, carpet flooring and rubber base painted gypsum board walls, 2'x2' exposed tee acoustical tile ceiling, direct/indirect LED lighting.
- The existing Records will be expanded to accommodate more storage and will consist of the following materials, carpet flooring and rubber base painted gypsum board walls, 2'x2' exposed tee acoustical tile ceiling, direct/indirect LED lighting.

CIVIL

Site Work

- Clear vegetation on the SE corner of the existing building and demolish portion of the existing sidewalk and curb at the east parking lot (RE: C1.00). Prepare area for the building expansion slab installation and utilities.
- Remove and dispose concrete paving at the entrance and exit to/from the south parking area to accommodate installation of the proposed utilities (RE: C1.00). Replace the concrete paving to match existing conditions (RE: C2.00).
- Expand east concrete parking area (add 2 parking spaces), install curb and walkway to the building expansion entrance (RE: C2.00).
- Provide positive drainage away from the existing building and proposed building expansion.
- Install security fence and gate.
- All disturbed green areas to be restored and vegetation to be established.

Utilities

- New sanitary connection to the proposed building expansion is proposed. Route approximately 400 LF of 6" sanitary sewer to connect to the existing sanitary sewer on the west side of the building. Sewer manholes to be installed at all change of direction, elevation, and connection locations (RE: C4.00).
- Building expansion will require a new 2" domestic water line connection with a separate water meter and backflow preventor. Domestic 2" line will connect to the existing 10" waterline located on the east side of the Center Street (RE: C4.00).

- Portion of the existing storm system located at the building expansion area to be demolished (RE: C1.00). Existing storm system to be re-routed, upstream flow from existing inlets and building downspouts to be connected to the new U/G storm system (RE: C3.00).

STRUCTURAL

Structural Scope of Work

- Structural work includes pier foundations, slabs-on-grade, load-bearing CMU walls, and steel-framed roof for the new building addition.
- Foundations will be designed and detailed in strict accordance with the recommendations outlined in a Geotechnical Report prepared specifically for this project.
- The new addition will be constructed adjacent to the existing building but will be designed as an independent structure to resist lateral and uplift wind forces.

Design Criteria

- Applicable Codes and Design
 - 2012 International Building Code
 - ASCE 7-10 Minimum Design Loads for Buildings and Other Structures
 - ACI 318-11, Building Code Requirements for Reinforced Concrete
 - ACI 530, Building Code Requirements and Specifications for Masonry Structures
 - AISC Manual of Steel Construction – LRFD 14th Edition.
 - Live Loads: Roof 20 psf (unreducible)
 - Rooftop Mechanical Units: Actual Weight of Equipment
 - Superimposed Dead Loads: 15 psf (ceiling mechanical and miscellaneous)
 - Wind Design Criteria:
 - Basic Wind Speed 149 mph (3-second gust wind speed)
 - Building Category IV
 - Wind Exposure B

- Wind-borne Debris Region
 - Yes
- Earthquake Load
 - Using Site Classification D for stiff clay soils, site is in Seismic Design Category “A” per ASCE 7.
- Snow Load
 - Ground snow load, P_g is 0 psf.

Foundations

- A Geotechnical Report has not yet been provided, but information from the existing building drawings will be used as basis of design until the report is made available.
- Floor slab will be minimum 5-inches thick, reinforced with #4 at 15” on center. Control joints will be placed in slab at maximum spacing of 15 feet in each direction. The slab will be placed over prepared subgrade and 15-mil vapor barrier. General Notes on the existing building drawings required removal and replacement of 5-feet of existing soil with select fill. Select fill was specified to be sandy clay (SC) or clayey sand (CL) with liquid limit less than 30 and plasticity index (PI) between 4 and 15. Select fill will be placed in loose lifts not exceeding 8-inches and will be compacted to 95% of the maximum dry density at a moisture content between optimum and 2% wet of optimum as determined by ASTM D 698.
- Exterior grade beams will be approximately 18” wide by 24” deep and reinforced with 3 - #8 continuous bars top and bottom. Stirrups will be #3 bars spaced at 10 to 12-inches on center. Interior grade beams will be used to support interior CMU walls and will generally be 14” wide by 24” deep, reinforced with 2 - #8 bars top and bottom.
- Drilled piers on the existing building bear at depth of 15-feet below the finish floor level. Piers for the new addition will likely be drilled to same or slightly deeper bearing depth. Anticipated sizes will be 24” diameter shafts with bells ranging in size from 36” to 60”. Piers will be located below interior columns and below grade beams at spacing of 15 to 20 feet on center

Steel Roof Framing

- The roof will consist of 20- gauge, 1 ½” deep Type B, galvanized metal roof deck supported by steel bar joists and wide flange steel beams and perimeter masonry walls. Steel frames consisting of steel angles will be used to frame a continuous L3x3 edge angle will be provided at perimeter of roof.

- Heavy mechanical rooftop units will require steel wide flange beams, channels and posts to transfer loads to columns or walls below.
- Structural steel exposed to weather or in unconditioned space shall be hot-dipped galvanized or painted with a zinc-rich special coating.
- Exterior load-bearing CMU walls will support the steel joists and will also provide lateral resistance for wind loads. Walls will be 8-inch thick and will be reinforced with #5 rebar at 16 inches on center, in fully grouted cells.

Cast-in-Place Concrete

- Reinforcing Bars: ASTM A615, Grade 60
- Slabs-on-grade: 3,500 psi
- Grade Beams: 4,000 psi
- Drilled Piers : 4,000 psi

Concrete Masonry Units (CMU)

- Normal Weight CMU: ASTM C55 or ASTM C90
- Unit Compressive Strength: 1,900 psi
- Mortar: Portland cement/lime Type M or S , 1,800 psi compressive strength
- Grout: 3,000 psi compressive strength
- Control Joint Spacing: Max 20 feet

Structural Steel

- W- and WT-Shapes: ASTM A572, Grade 50
- Angles, Channels and Plates: ASTM A3
- Square/Rectangular HSS: ASTM A500, Grade B
- Round HSS: ASTM A501 or ASTM A53, Grade B

MEP General

Codes and Guidelines

- NFPA Standards (volumes 13, 14, 72 and others as applicable)
- National Electrical Code.
- International Building, Uniform Mechanical, International Plumbing and International Fire Codes (current editions) with **City of Baytown** Amendments.
- Texas Accessibility Standards (TAS).
- Accessibility Guidelines (ADAAG) of title III, Americans with Disabilities Act (ADA) of 1990. Note that ADA is Federal civil rights law. Enforcement of ADA is by Federal Agencies specified in the Act. Owners shall obtain appropriate legal counsel to determine methods of compliance for the specific Work of this project.
- Fire Alarm Rules of Texas Commission on Fire Protection.
- The International Energy Conservation Code and/or ASHRAE 90.1 as applicable with all relevant amendments.
- NFPA 101 Guidelines and Standard.
- Applicable ASHRAE guidelines and Standards.

CHANGE TO:

"CITY OF DEER PARK"

**NOTE BY: ADAM BALLESTEROS,
CITY OF DEER PARK, CITY ENGINEER**

MECHANICAL

HVAC Design Criteria

- Summer design outdoor condition: 100°F DB, 80°F WB.
- Summer outside air handling unit design conditions: 92°F DB, 80°F WB.
- Winter design temperature: 24°F
- Indoor design conditions
 - Occupied public spaces: 74°F (summer), 72°F (winter) maintained plus/minus 1°F. These values are within ASHRAE comfort guidelines

- Occupied office humidity range: 50%-60% RH (summer). No humidity controls provided.
- Non-occupied rooms: 85°F summer, 65°F winter.
- Outside air pre-treating: (summer), 40°F

CHANGE TO:

"CITY OF DEER PARK"

NOTE BY: ADAM BALLESTEROS,
CITY OF DEER PARK, CITY ENGINEER

Lighting heat loads

- Main lobby areas: 1.5 watts per usable sq. ft.
- Office Areas: 1.3 watts per usable sq. ft.
- Other occupied areas: 1.0 watts per usable sq. ft.

Receptacles/Equipment (heat gain for calculation purposes).

- Occupied Tenant Space: 2.0 watts/sq. ft. of Tenant Full Floor Usable Area

Outside air

- Ventilation outside air will be based on the City of Baytown Building Code and ASHRAE Standard 62.1. (1 ACH = 1 air change per hour)

Occupancy

- Typical Tenant Space: 1 person/150 sq. ft. of Tenant Full Floor Usable Area for heating and cooling loads.
- Minimum air circulation per usable square foot within interior zone spaces – 0.65 CFM/sq. ft.

Air Load Factors

Cooling Heating

Coil Air Quantity

10% 5%

Motor Heat

5% ----

Heating System "Warm-up" Factor

--- 10%

The HVAC system shall be designed with the following goals for sound levels:

- General office, meeting rooms, public areas, and non-equipment areas – NC 40.
- Conference spaces, Boardroom, Command Center – NC 35.
- Spaces adjacent to air handling unit equipment rooms and equipment areas – NC 42 ± 2.

Air Side Systems

- Renovation area within existing building: The load associated with the renovated area is not expected to increase. Therefore, the existing base building HVAC equipment will be re-utilized to serve the renovated area. Existing main trunk ductwork will be reutilized, and existing grilles/registers will be relocated/replaced as necessary to accommodate the new space plan layout.
- New building addition: This system shall consist of two new 20-ton air-cooled single-zone VAV rooftop units (20 tons total). Each unit will be sized to handle approximately 65% of the peak building addition load. Each rooftop unit will supply a common supply duct that will serve the entire building addition. The building addition will be supplied from the rooftop units serving multiple VAV and Fan-powered terminals with electric heat. The rooftop unit will be provided with full economizer controls as well as management of outdoor air to meet ASHRAE 62 ventilation requirements. Rooftop air handling unit will be a custom unit with MERV 13 filters on both the return and outdoor air inlet. Unit will be provided with stainless steel cooling coils and frames, supply fans, face and bypass dampers, variable speed drives, internal vibration isolation, and roof curb sound attenuators. Air handling unit casing shall be 4" thick double wall construction.
- Building relief air shall be removed by a tap to the Toilet Exhaust. Toilet exhaust air will be removed from the space through exhaust registers located in the toilet rooms. Toilet Exhaust and Floor Relief Air shall utilize common duct system with an exhaust fan located within the building with discharge thru suitable exterior wall louvers (as approved by the Architect). Toilet exhaust air and relief air quantities shall be controlled as required by the outside air quantity. Minimum exhaust rate from toilet rooms shall be 2 cfm per square foot. Minimum building pressurization shall be maintained around 400 CFM positive.

Air Distribution Devices

- Linear bar type architectural slot diffusers in all gyp board ceilings or walls of lobbies and public spaces.
- Sidewall, dual direction grilles in all "back-of-house" areas such as electrical rooms
- Typical "Omni" type 2'x2' ceiling diffusers:

Toilet Exhaust

- A toilet exhaust/building relief fan will be installed to exhaust the restrooms and provide relief for the outside air. A DDC controlled damper will monitor and regulate exhaust air CFM to provide proper relief of the outside air quantities to occupant's system in accordance with ASHRAE 62.1 Standards, while still maintaining proper floor pressurization.

Controls

- **Building Controls:** The building control system is an existing JCI system that is currently being upgraded by the facility. The scope of this project for the existing renovation area will be to verify proper controls and sequences serving the area. For the new addition, all new equipment will be integrated into the existing control system including modifications to graphics and sequence addition to fully integrate the new addition into the existing Building Automation System. All necessary software and custom graphics will be included.

Air Balance

- The Contractor shall demonstrate equipment and system performance to the Engineer and Owner's representatives.
- An independent NEBB/AABC Certified test and balance contractor shall verify performance of air and water systems and provide written documentation of system performance
- **Piping Systems**
 - Condensate Drains: Type L hard drawn copper or Schedule 40 galvanized steel.
- **Hangers**
 - Split ring or adjustable clevis for single pipe-trapeze hanger for multiple pipes.
- **Insulation**
 - Supply and Outside Air Ductwork: 2" thick, one-pound density flexible fiberglass with foil face and vapor barrier K not higher than 0.25 at 100°F DB mean temperature difference
- **Vibration Isolation**
 - Air Handling Units - Roof Mounted: Internal isolation from the factory.
 - Fan Vent Sets: Amber/Booth Type SE with 1" Deflection.

ELECTRICAL

- The entire electrical distribution system shall comply with local codes and the current edition of the National Electrical Code.
- The renovated area will reutilize the existing power already serving the area. Existing panels on the current records room wall shall be relocated to the new wall that will be constructed 10 feet away.
- The new building addition will be served from the existing 480Y/277V, 3-phase, 4-wire, 1200A electrical service. A new 400amp distribution panelboard shall be provided and fed from the

existing main gear to serve the new building addition. The new DPB shall be provided with TVSS and metering compartment; bussing shall be arranged for future extension. The electrical distribution will originate from the main switchboard using a conduit and wire distribution system.

- Conductors connecting receptacle and switch circuits to lighting and power home run junction boxes in finished areas, in accordance with the NEC, may be multi-wire, steel jacketed, Type “MC” cable, consisting of one, two, three or four 12 AWG copper “THHN” or “THHN/THWN” insulated phase and neutral conductors. MC cable can be run for a maximum length of twenty-five feet from any piece of utilization equipment (J-box, receptacle, light fixture, switch, etc.) to a home run junction box. (The home run is defined as the conduit run from that home run junction box back to the panelboard.)
- MC cable shall not be installed exposed.
- Type “MC” steel jacketed cable termination fittings shall be T&B #253, O-Z Gedney C5, Steel City Series XC-400 or approved equal clamp type, malleable iron fittings. Die cast fittings are not acceptable.
- 480Y/277-volt panels will serve the lighting and HVAC equipment. All panels will have at least 20% spare capacity for future growth. Panels will be provided with internal surge protective device (SPD).
- Dry-type transformers (K-factor rated) and panelboards will serve the 208Y/120-volt occupant receptacle and equipment loads. 200% neutrals, IG ground bars, and surged protective device (SPD) shall be provided to all panelboards. New 208Y/120V panelboards and transformers shall be provided as dictated by the load.
- All line voltage wiring will be in rigid metal conduit or EMT, except for receptacle/switch drops where MC cable will be allowed for a maximum length of 25’. Utilize Schedule 40 PVC conduit where below grade or poured in slabs. All wiring will be copper. Wiring for individual fire alarm indicating and initiating devices shall be EMT or rigid metal conduit where exposed to the elements.

Standby Power

- An Outdoor weatherproof 200 kW, 480Y/277 volts, 3 Phase, 4 Wire diesel genset shall provide backup power to the new building addition. The genset shall be provided with a skid mounted UL2085 diesel fuel tank to provide 72 hours of run time a full rated capacity.
- Separate Isolation bypass automatic transfer switches shall be utilized to separate emergency and standby building loads.
- The generator system shall be capable of serving the loads for only the new building addition and not the existing building.

- Provisions shall be made to connect the building to a portable genset via cable tap box and manual transfer switch as well. An additional connection point to power the 911 room separately to a portable genset via cable tap box and manual transfer switch shall also be provided.
- A generator main switchboard shall be provided
- UPS System (serving the new building addition):

Topology

- Distributed redundant comprised of an 2N redundant system.
- Each system will consist of one 100kVA/100kW module
- (Vertiv EXM or approved equal). Each module will be provided with 20-year VRLA (GNB Absolyte IIP or approved equal) batteries for 5 min. runtime at 100% load.
- The two system shall be interconnected w/a Load Bus Sync module to facilitate static transfer switch (STS) sync for all downstream single corded devices.
- Each system will be provided with a 3-breaker maintenance bypass cabinet.
- Each UPS system shall be provided with 480 volts, 3 Phase, 3 Wire + Ground output power distribution panel to serve UPS loads throughout the new building addition.
- Two 75kVA power distribution units (PDUs) with sub-feeds will provide power to the server room in an A & B configuration for dual corded equipment.
- One 45kVA dual input PDU/STS shall be provided for single corded critical loads.

Lighting Systems

- Lighting system will be flexible with modular wiring technology. The lighting goal shall be 1.0 watts/sq. ft. with lighting controls in compliance with current IECC.
- Utility room and “back-of-house” lighting shall consist of 1’x4’ fluorescent chain hung fixtures with cover guards and T5 lamps.
- Office area standard lighting will consist of the fixtures specified on the architectural drawings. Each fluorescent fixture will utilize electronic ballasts (less than 10% THD). The fixtures shall be designed to comply with the ‘preferred’ recommendations of the IES RP-24 for lighting levels and cutoff for areas in which extensive VDT usage is expected. Lighting for equipment areas will be designed and fixtures selected for individual needs.

- All enclosed rooms throughout the building shall be provided with individual occupancy sensors with manual override control; occupancy sensors shall be either wall mounted, or ceiling mounted depending on the size of the space.
- A centralized, programmable lighting control relay panel system and infrastructure will be installed and integrated into the new building management system.
- All open work area lighting shall be controlled via the programmable lighting control system with tenant override switches located within the open area space.
- At a minimum, all lighting controls shall conform to current IECC guidelines.

Fire Alarm Systems

- A complete code and ADA compliant, fully addressable fire alarm system shall be provided. The system shall include a minimum of the following:
 - Manual pull stations.
 - Multi-sensor smoke detectors located within the common spaces.
 - Speaker horns and visual strobes (ADA approved).
 - Cross zoned multi-sensor (photo-electric and heat) detectors at elevators lobbies, which interface with the elevator control system.
 - Additional monitoring and indicating devices as required by local codes.

Lighting Systems

- Furnish and install a UL Master Label lightning protection system for the new building addition to be tied into the existing lightning protection system for the existing building. The system shall be designed to comply with requirements of the National Fire Protection Association and the Underwriters Laboratories, Inc. The system shall be designed to qualify for the maximum insurance rate reduction allowed for lightning protection for this type of construction.
- Grounding System shall be based utilizing Motorola R56 standard.
- Grounding Electrode System: Bond grounding electrodes together (as defined by the National Electrical Code) to comprise the grounding electrode system. Provide a buried ground ring for the building with ground rods spaced no more than 60 feet apart.

Plumbing

Domestic Cold Water

- Provide a system of domestic cold water to all fixtures and equipment requiring cold water.
- For the new addition, hose bibs will be provided in mechanical rooms and under the counter in the men's restrooms. A freeze-proof wall hydrant will be provided on each exterior face of the building.
- The renovated area will reutilize existing domestic cold water already serving the existing building. For the new addition, new cold-water service will be brought in from the west side of the addition.

Sanitary Waste and Vent System

- For the renovated area, connect all new waste and vent piping to the existing systems. Saw cut and patch existing concrete as necessary.
- For the new addition, provide a diverse system of waste and vent piping throughout. Provide waste and vent stacks in toilet chases extending to below grade to 5' 0" outside of building. All floor drains shall be vented, and trap primed.

Storm Drainage System

- For the new addition, provide a system of roof drains and internal primary and overflow risers connected to the site storm sewer system (re: civil). Collect drains into vertical leaders extending below grade. Extend storm lines from vertical leaders to 5'-0" outside building. Roof drains and horizontal runs of piping from roof drains shall be insulated. Overflow drains shall be independent risers daylight through the outside building wall near grade.

Fire Protection System

- The existing building is, and the new building addition will be fully sprinklered. Quick response concealed type heads with white cover plates and adjustable inlets will be provided in all public spaces. All areas without ceilings will have exposed heads. Branch sprinkler piping shall be located near structural slab or deck. Design to be based on NFPA 13 and local code requirements.
- All critical areas (UPS room, Server Room, Radio Room, etc.) will be served by a pre-action fire suppression system complete with alarm initiation and notification devices. The pre-action system shall be interlocked with the building fire alarm system.
- UL listed/FM approved flexible fire protection sprinkler drops (such as manufactured by FlexHead Industries) shall be used in lay-in ceiling areas to allow for low-cost, rapid relocations of sprinkler heads during renovations.

- Quick response concealed type heads with white cover plates and adjustable inlets will be provided in all public spaces. All areas without ceilings will have exposed heads. Branch sprinkler piping shall be located near structural slab or deck. Design to be based on NFPA 13 and local code requirements.
- Design sprinkler densities are NFPA 13 light hazard densities. These densities should be reviewed with the insurance carrier, and if they agree, can be reduced to NFPA light hazard requirements:
 - Office Areas and Public Areas: 0.14 gpm/sq. ft. over 2000 sq. ft.
 - Work Areas with Equipment: 0.19 gpm/sq. ft. over 2000 sq. ft.
 - Storage Areas: 0.20 gpm/sq. ft. over 3000 sq. ft.
 - Mechanical Equipment Rooms: 0.20 gpm/sq. ft. over 1500 sq. ft.

Materials

- Fixtures: Vitreous china plumbing fixtures, chrome plated brass trim, and stainless-steel ADA compliant drinking fountains.
- Domestic Cold Water:
 - Inside: Type “L” copper or Schedule 40 galvanized steel.
 - Outside: Type “K” copper or Class 52 ductile iron.
- Domestic Hot Water: Type “L” copper or Schedule 40 galvanized steel.
- Sanitary Waste and Vent:
 - Inside: Cast iron bell and spigot with elastomeric joints on no-hub cast iron.
 - Outside and Below Slab: Cast iron bell and spigot with elastomeric joints.
 - Vents: Cast iron bell and spigot with elastomeric joints or no-hub cast iron.
- Storm Drainage.
 - Inside Building: Cast iron bell and spigot with elastomeric joints or no-hub cast iron.
 - Below Slab and Outside: Cast iron bell and spigot with elastomeric joints.
- Fire Protection:

- Sprinkler piping inside - Schedule 40 black steel.

IT / Security

The telecommunication system for this project will be comprised of several components including the structured cabling system (SCS), telephone system, active data network system, Cable Television (MATV), and Radio System. These components, as well as other related components, will be discussed individually in the following sections. The related components of the telecommunication system include grounding, administration, MEP requirements, architectural requirements as well as interfacing with other systems such as security and building automation.

The telecommunications system design will be based on the Telecommunications Industries Association (TIA) standards as well as the Building Industry Consulting Services, Inc. (BICSI) standards. In addition, the design will comply with Deer Park IT standards.

This project consists of two (2) separate scopes of work. One is the renovation of the existing facility and the second is the construction of a new Emergency Operation facility.

Renovation Building Scope

- The existing building consists of multiple separate rooms containing the technology equipment. These rooms consist of the following:
- Telephone Room #136. This room currently is the service entrance room for the facility. Service is being provided by PS Lightwave, Comcast, Phonoscope as well as AT&T. In addition, there is singlemode fiber routing to the City Hall Server Room. This room is protected by a dry chemical suppression system and power is by generator and UPS. This room includes the horizontal cabling to all of the work area devices. This room is planned to remain. There are also some radio RF signals coming into this room. There is no scope for this room.
- Computer Room #122. This room includes a single cabinet and houses many of the data servers for this facility. This room has both generator and UPS power supplying the equipment. There is no scope for this room.
- Dispatch Equipment Room 1 (Rm #132A). This room is located within the construction area. It includes the Motorola radio equipment (7), Distributed Antenna System (DAS), Radio Cable entrance facilities, the S2 NetBox Extreme security equipment and associated servers, a PLC cabinet, two (2) Telecor T3-SC Security Intercom Controller, intercom cabinet, dedicated earth ground for GHC 911 Room, a ground plate and the power is both generator and UPS. This room will remain at its present location. The security equipment will be removed and replaced. All intercom and radio equipment will remain. Services will be extended from this room to the new Technology Room in the new facility.
- Dispatch Equipment Room 2 (Rm #132B). This room is dedicated to GHC 911 equipment. There are two (2) cabinets of equipment. This room will be relocated to the new facility.
- Office Space. The dispatch and emergency operation functions for the building will be removed. All associated cables that are no longer required will be removed back to source and

disconnected from the source. The floor space will be renovated following the architectural plans. All new horizontal cables will follow the structured cabling equipment requirements as noted below.

- **Specific Technology Cabling Scope.** For the renovated area, new wireless access coverage will be provided to ensure full coverage of the renovated space. At all renovated office locations, the following cabling will be provided:
 - **Desk Position:** Two (2) Cat 6 Cables for standard office. Additional cable drops for large offices with conference table or administrative assistant offices with printers.
 - **Printer Location:** Two (2) Cat 6 Cables
 - **Monitoring Equipment Locations:** One (1) Cable Drop. These locations include lighting panels, BAS panels, etc.
 - **Wireless Access Points:** Two (2) Cat 6A cables
 - **Additional Cable drops** as noted on AV Plans or Security Plans.

New Building Scope

The new Building will include an Emergency Operations Facility, Dispatch, Break Room, Office Space, Conference Rooms and support spaces including two Technology Rooms. One technology Room is dedicated to GHC 911 and one room is dedicated to Deer Park. Refer to the General Requirements Section for the Technology Room requirements.

- **Specific Technology Cabling Scope:**
 - For the new building, wireless access coverage will be provided to ensure full coverage of the space. The following cabling will be provided:
 - **Desk Position:** Two (2) Cat 6 cables for standard offices. Additional cable drops for large offices with conference table or administrative assistant offices with printers.
 - **Operators Console Position:** Four (4) Cat 6 cables per desk position
 - **Training Room:** One (1) Cat 6 cable per desk position.
 - **Printer Location:** Two (2) Cat 6 Cables
 - **Monitoring Equipment Locations:** One (1) Cable Drop. These locations include lighting panels, BAS panels, etc.
 - **Wireless Access Points:** Two (2) Cat 6A cables

- Additional Cable drops as noted on AV Plans or Security Plans.

Cable Media

The telecommunications cabling media assessment will include the backbone cables, horizontal cables and connectors. This is a high-performance cabling system and requires a 20-year warranty which is typical for structured cabling systems (SCS). Only certain manufacturer solutions will be allowed for this system.

- Approved SCS Manufacturers. CommScope Systimax, Leviton/Berk-Tek, Panduit/General
- Backbone Cables. Backbone cables will consist of a combination of 50-micron laser optimized multimode fiber as well as singlemode fiber. In addition, two (2) bundles of Cat 5E cables will routed to the existing Telephone Room from the new Dispatch Technology Room.
- Horizontal Cables. The horizontal cables will be Cat 6 rated cables. For wireless access points, the cables will be Cat 6A rated. The cables will route from the Technology Room to the communication outlet or device. All runs must be within the 295' distance limitations.
- Horizontal Patch Cables. All patch cords must match the rating of the cable to which they are patching. The cables are color coded based on the application for easy visual distinction as follows:
 - Blue = Data
 - Black = Surveillance
 - White = Voice
 - Red = Security
- Horizontal Terminations
 - All terminations will be RJ45 connectors with same rating as the terminating cable. Blue jacks will be used for data, white jacks for voice and orange jacks for Cat 6A cables.
- Backbone Cable Terminations.
 - All terminations will be splice-on LC type. They will terminate into minimum 2RU termination panels.

Pathways and Spaces

The structured cabling will utilize wire mesh cable tray located in the main corridor spaces. When cables exit the tray, Cat 6 rated cable hangers will be used thru the accessible ceiling spaces and conduit will be used thru any inaccessible ceiling spaces. Conduit will be used to all wall boxes to the accessible ceiling space.

New backbone cables will primarily use the cable tray system. Where backbone cables exit the cable tray system, they must be installed in conduit. New and existing communication pathways will be utilized for the backbone cable distribution.

The minimum size for conduit for horizontal cables will be 1". Where multiple cables are run parallel, one larger size conduit may be used to minimize the use of 1" branch conduits.

- Distance Limitations
 - 295' Horizontal Cables
 - 2000m Singlemode Fiber
- Electromagnetic Interference (EMI). EMI must be considered when routing data cables as they are very susceptible to EMI which can, in turn, create problems with the electronics or end devices from working properly. EMI can be limited by keeping horizontal cable pathways clear from radiating sources such as power wiring, motors and ballasts as well as properly shielding and grounding the cables.
- The following cable clearances should always be maintained for structured horizontal cables
 - 3 feet from motors and generators
 - 6 inches from electrical conductors (120V-480V)
 - 5 inches from fluorescent sources
 - 12 inches from 480v and above

Lightning Immunity

The communication cabling infrastructure and electronics are very sensitive to lightning strikes and electrical surges of any kind. Any IT device that is located below the building roofline and attached to the building may use copper (CAT 6/6A) connectivity. Any IT device that rises above the roof line should use fiber connectivity in order to provide immunity from the impacts of lightning. If an IT device is detached from the building and below roofline, then it may utilize copper connectivity if it is located within the cone of the building lightning protection coverage.

Requirements for Technology Rooms (TR)

- The TR rooms will require a minimum ceiling height of 9.0' AFF to structure. No false ceilings are allowed in these rooms.
- The rooms shall have lockable doors minimum of 3'-0" wide by 84 inches tall with full 180-degree swing. Door sills are not allowed. Swing door outward whenever possible. The door must have a keyed locking mechanism or electronic card access.
- Flooring shall consist of non-carpeted static resistant flooring such as sealed (anti-static floor sealant) concrete. If floor tiles are installed, they must be static dissipative tile (SDT). It is recommended to treat walls and ceilings to reduce dust and static electricity.
- HVAC for this room shall consist of continuous 24-hour environmental control to maintain a temperature of 64 to 75 degrees with a relative humidity of 30%-55%. Maintain positive pressure inside the room.
- No wet piping route into these rooms. If a sprinkler is required, then it shall be installed with a wire cage to prevent accidental leakage and located so that it is not above any equipment cabinets.
- No HVAC condensers or compressors are allowed inside the MTR or TR Rooms.
- Minimum floor loading shall be 50 lb/ft.
- Lighting shall consist of 50 foot-candles minimum and be located at least 8.5 feet AFF. Locate lighting higher, if possible, in order to maintain at least 18 inches from the cable tray system.

Additional Requirements for TR Rooms for Emergency Operations

- Redundancy in the backbone cabling from the MTR to the TR's.
- Redundancy in the service provider entrance facilities. Redundancy may include multiple points of entry as well as multiple service providers.
- Room located above flood plain and generally recommended to be above the first level.
- Redundancy in the power system. Power to the room should come from separate sources, should include UPS as well as generator back-up.
- The electronics should have dual power supplies for automatic fail-over.
- The room HVAC unit should be on the generator power supply.
- Dry-type fire suppression system.

Grounding

- Grounding and Bonding of the telecommunications system will follow the TIA-607 standards. It will include all metallic cable jackets, cable tray and racks, grounding busbars, etc. as defined in the standards.

Facility Systems Monitored

- It is important for the facility to monitor technology systems in order to minimize any potential failures. Monitoring will be performed on the technology UPS, generator, building management system, and other systems deemed essential.

Telecommunications Administration

- The Telecommunications System administration and identification is important for proper maintenance and troubleshooting of the structured cabling system. The administration will follow the TIA-606 standards. All horizontal, backbone, grounding, termination hardware, racks, etc. should follow these standards. Refer to Figure below for typical labeling. All wire labels should fully wrap the cable jacket and be repetitive using black letters on a white tape with minimum 12pt font.

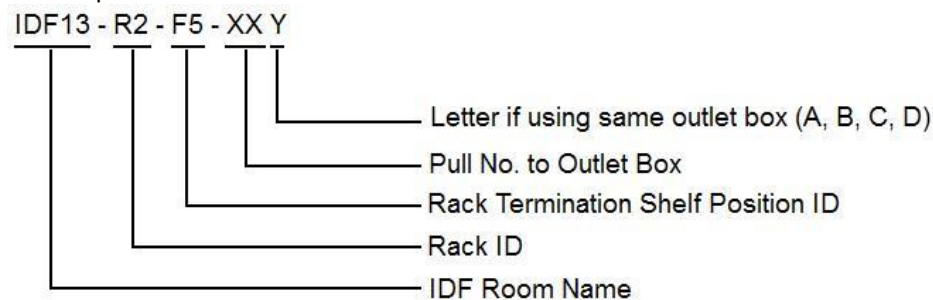


Figure 1.1.8-A Proposed SCS Labeling

- Quality Assurance
 - Quality Assurance will be maintained by requiring a track record of communication experience and experienced personnel. Also, an RCDD must be present during the construction and testing of the telecommunications system. The selected contractor for the SCS must be a certified and currently registered Partner for the respective SCS capable of issuing a numbered registration certificate for the entire Cabling System.
- Installation Requirements
 - The telecommunications cabling is a high-performance infrastructure and must be installed correctly. The installer will conform to the manufacturers and TIA guidelines for installing the cabling such as bend radius, cable untwist, slack cables, grounding, identification, terminations, stretching, etc. All installation requirements will be clearly identified in the specifications

Warranty

- The telecommunications system shall include a 20-year warranty on the performance standards, materials and installation.

Security Systems

The existing security system for the existing facility will remain unchanged. The existing systems will be expanded to support the new facility.

Surveillance System

The existing security system is unknown. New IP cameras with associated licenses will be required to monitor the new building as well as the parking gates. All new cameras will have a minimum of 1MP resolution. They will be comprised primarily of fixed cameras with wide dynamic range for light sensitivity. All exterior cameras will include the day/night feature.

- All cameras will be recorded on motion. The compression will be H.264. New video recorders will be required and will provide enough storage for 30 days of video retention.
- Video Coverage will be provided for the following areas:
 - All access-controlled portals including both pedestrian and vehicular.
 - The building perimeter
 - The secured parking facility in areas where sensitive or valuable equipment is located
 - The secured building facilities in areas where sensitive or valuable equipment is located
 - All MTR and TR Rooms
 - All entry and exit doors (this should also fall under access-controlled portals)

Access Control System

- The current access control system is an S2 NetBox Extreme System.
- New access control will be required for the following areas:
 - All entry and exit doors
 - The rooms within the facility which contain valuable or sensitive equipment.

- Areas within the building with difference security access levels such as securing the public side from the operation side. There also may be differing access levels within the operational side such as securing the command center, IDF Rooms or other areas where there may be differing security clearances required.

Security Systems General Requirements

- Cable Infrastructure
 - All security system cabling will follow the structured cabling system installation requirements with the following exception. Access control cabling must be installed in conduit for the complete route from the end device back to the owner's security cabinet.
- Access Control Cabling.
 - The access control cable will be as follows:
 - Card Reader cable: 6-conductor, #18AWG stranded bare copper, shielded
 - Alarm Point cable: 2-pair, #18AWG stranded bare copper, shielded
 - Panic Hardware cable: 3-pair, #18AWG stranded bare copper, shielded
 - Electronic Lock cable: 2-pair, #16AWG stranded bare copper, shielded
 - Request-to-Exit cable: 2-pair, #22AWG stranded bare copper, shielded
 - Intrusion Alarm cable: 2-pair, #18AWG stranded bare copper, shielded
- Surveillance System Cabling
 - All new cameras will be IP-based cameras. Therefore, the cables will be installed following the structured cabling requirements for data cables. The cables will originate in the TR room and terminate at the camera location.
 - A slack loop of approximately 20' prior to termination of the cable provides flexibility for future modifications.
- Quality Assurance
 - Quality Assurance will be maintained by requiring a track record of communication experience and experienced personnel. The contractor must be certified by the manufacturer of the products to be installed, adhere to the engineering, installation and testing procedures, and utilize the authorized manufacturer components and distribution channels in provisioning this Project.

- All members of the installation team must be factory certified by the manufacturer(s) as having completed the necessary training to complete their part of the installation. Written confirmation of such certification by manufacturer(s) shall be submitted to the Owner if requested.
- Security System Monitoring
 - The security system will be monitored from workstations within certain offices in the facility with the ability to monitor the system offsite.

END OF CONCEPTUAL DESIGN NARRATIVE

AGREEMENT FOR ARCHITECTURAL SERVICES

City of Deer Park Emergency Operation Center (EOC) expansion and Police Department (PD) Renovation Final Design Phase

This Agreement is made and entered into in Deer Park, Harris County, Texas on the 6th day of April 2021; by and between parties:

The City of Deer Park, (“CITY”) a Municipal Corporation in the State of Texas, AND

Pierce Goodwin Alexander & Linville, Inc. (PGAL), (“ARCHITECT”) duly licensed, and practicing under the laws of the State of Texas.

Said Agreement being executed by the City pursuant to the City Charter, Ordinances, and Resolutions of the City Council, and by the ARCHITECT for architectural services hereinafter set forth in connection with the City of Deer Park Emergency Operation Center (EOC) expansion and Police Department (PD) Renovation Final Design Phase Project (the “project”) for CITY.

CITY retains ARCHITECT to perform architectural services related to the project in return for consideration of payment by CITY under terms and conditions set forth in the articles below.

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ARTICLE 2. COMPENSATION	2
ARTICLE 3. CITY’S RESPONSIBILITIES	3
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ARTICLE 1. SCOPE OF SERVICES

1.1 Scope of Services. ARCHITECT will provide architectural, design, consultation, project management, and other services as required to perform and complete the Scope of Services and Fee Proposal (the "Proposal") (Attachment A) which are part of this Agreement. The Scope of Services (the "Services") and the time schedules set forth in the Proposal are based on information provided by CITY and ARCHITECT. The Services and deliverables listed in the Proposal are essential terms of this Agreement.

1.2 ARCHITECT will complete the following services in addition to the Proposal:

- i. Prepare construction plans and specifications for the proposed project, including all details, ready for construction. The construction plans and specifications will include civil, structural, mechanical and electrical components. ARCHITECT will utilize and make ready any existing City standard details as relative to the project.
- ii. Submit to the CITY for review and comment on submittals of the construction documents, followed by a 100% complete submittal, which addresses all comments.
- iii. Attend meetings with CITY representatives to review submittal phases.
- iv. Submit to the City three (3) sets of final, sealed construction documents and PDF copies of the sealed construction documents digitally (CD, USB drive, email, etc.).
- v. ARCHITECT will provide design and technical support. The scope of this service includes coordination with the CITY on design and construction issues as requested. In addition, ARCHITECT will make visits to the site a minimum number of five (5) times throughout the construction, including a final inspection with City Staff.
- vi. ARCHITECT will formally communicate CITY via e-mail on a weekly and monthly basis on the progress of the project and convey issues with their resolution. In addition to the electronically transmitted progress reports, ARCHITECT will be responsible for preparing as-built drawings based on contractor and CITY comments.
- vii. ARCHITECT will review and advise on any design modification or changes suggested by CITY.
- viii. The 100% Design will include pertinent specifications and complete design plan sheets. All maps and drawings will be completed or converted into AutoCAD when submitted to CITY.

1.3 If this information is incomplete or inaccurate, or if site conditions are encountered which materially vary from those indicated by CITY, or if CITY directs ARCHITECT to change the Services shown in proposal, a written amendment equitably adjusting the costs, performance time and/or terms and conditions, shall be negotiated in accordance with the Schedule of Rates (the "Rates") (Attachment B) and executed by CITY and ARCHITECT.

ARTICLE 2. COMPENSATION

2.1 Compensation. ARCHITECT bills for its services based on the Proposal. Additional services based on scope of services change directives from the City will be billed using the Rates as shown in Attachment B of this Agreement. As requested, ARCHITECT has provided a not to exceed fee for the Services amounting to:

\$384,525 (three-hundred and eighty-four thousand, five-hundred and twenty-five dollars).

In addition, reimbursable expenses will be billed according to the proposal in the estimated not to exceed amount of: \$5,000 (five-thousand dollars). ARCHITECT will not exceed any of the above amounts without prior approval from CITY. ARCHITECT will notify CITY, for approval, of any proposed revisions to the Schedule of Rates and effective date thereof which shall not be less than thirty (30) days after such notice.

2.2 ARCHITECT will submit monthly invoices for Services rendered, and CITY will make payment within thirty (30) days of receipt of ARCHITECT'S invoices. If CITY objects to all or any portion of an invoice, it will notify ARCHITECT of the same within fifteen (15) days from the date of receipt of the invoice and will pay that portion of the invoice not in dispute, and the parties shall immediately make every effort to settle the disputed portion of the invoice. Prices or rates quoted do not include state or local taxes.

ARTICLE 3. CITY'S RESPONSIBILITIES

3.1 City's Responsibilities. CITY will designate in writing the person or persons with authority to act on behalf on all matters concerning the services to be performed.

3.2 CITY will furnish to ARCHITECT all existing studies, reports, data and other information available to CITY necessary for performance of the Services, authorize ARCHITECT to obtain additional data as required, and furnish the services of others where necessary for the performance of the Services. ARCHITECT will be entitled to use and rely upon all such information and services.

3.3 Where necessary to performance of the Services, CITY shall arrange for ARCHITECT to have access to any site or property.

ARTICLE 4. PERFORMANCE OF SERVICES

4.1 Performance of Services. ARCHITECT's services will be performed within the schedule and time period set forth in Attachment A.

4.2 ARCHITECT shall perform the Services, and any additional services as may be required, for the development of the Project to completion.

4.3 If required, additional services will be performed and completed within the time period agreed to in writing by the parties at the time such services are authorized.

4.4 If any time period within or date by which any of ARCHITECT's services are to be performed is exceeded for reasons outside of ARCHITECT's reasonable control, all rates, measures and amounts of compensation and the time for completion of performance shall be subject to equitable adjustment.

ARTICLE 5. CONFIDENTIALITY

5.1 Confidentiality. ARCHITECT will hold confidential all information obtained from CITY, not previously known by ARCHITECT or in the public domain.

ARTICLE 6. STANDARD OF CARE AND WARRANTY

6.1 Standard of Care. In performing services, ARCHITECT agrees to exercise professional judgment, made on the basis of the information available to ARCHITECT, and to perform its ARCHITECTURAL services with the professional skill and care of competent design professionals practicing in the same or similar locale and under the same or similar circumstances and professional license. ARCHITECT also agrees to perform its ARCHITECTURAL services as expeditiously as is prudent considering this standard of care. This standard of care shall be judged as of the time and place the services are rendered, and not according to later standards.

6.2 Warranty. If any failure to meet the foregoing standard of care Warranty appears during one-year from the date of completion of the services and ARCHITECT is promptly notified thereof in writing, ARCHITECT will at its expense re-perform the nonconforming services.

6.3 The foregoing Warranty is the sole and express Warranty obligation of ARCHITECT and is provided in lieu of all other warranties, whether written, oral, implied or statutory, including any warranty of merchantability. ARCHITECT does not warrant any products or services of others. ARCHITECT, however, expressly acknowledges that these warranty obligations do not eliminate the applicability of the standard of care to all of its services and that the CITY may still retain remedies against ARCHITECT following the expiration of the warranty period in this Agreement, contract, tort, or otherwise, as the law allows.

ARTICLE 7. INSURANCE

7.1 **Insurance.** ARCHITECT will procure and maintain liability insurance coverage as required by law and provide a Certificate of Liability Insurance. At a minimum, ARCHITECT will have the following coverage:

- (1) Workers compensation and occupational disease insurance in statutory amounts.
- (2) Employer's liability insurance in the amount of \$1,000,000.
- (3) Automobile liability in the amount of \$1,000,000.
- (4) Commercial General Liability insurance for bodily injury, death or loss of or damage to property of third persons in the amount of \$1,000,000 per occurrence, \$2,000,000 in the aggregate.
- (5) Professional errors and omissions insurance in the amount of \$1,000,000.

7.2 ARCHITECT has provided a current Certificate of Liability Insurance (Attachment C) to CITY demonstrating and reflecting that ARCHITECT has procured and maintains insurance coverage in accordance with the requirements stated above.

ARTICLE 8. INDEMNITY

8.1 **Indemnity.** TO THE FULLEST EXTENT PERMITTED BY LAW, ARCHITECT SHALL INDEMNIFY, AND HOLD HARMLESS THE CITY, ITS OFFICERS, OFFICIALS, AGENTS, DIRECTORS, AND EMPLOYEES, FROM AND AGAINST ALL CLAIMS, CAUSES OF ACTION, DAMAGES, LOSSES, LAWSUITS, JUDGMENTS, FINES, PENALTIES, OR LIABILITY OF ANY CHARACTER, TYPE OR DESCRIPTION INCLUDING WITHOUT LIMITATION, ALL EXPENSES OF LITIGATION, INCLUDING EXPERT OR CONSULTANT FEES, COURT COSTS, AND ATTORNEY'S FEES, ARISING OUT OF OR RESULTING FROM BODILY INJURY OR DEATH OF ANY PERSON, OR PROPERTY DAMAGE, OR OTHER HARM TO THE EXTENT SUCH BODILY INJURY, PROPERTY DAMAGE, OR HARM ARISES OUT OF OR IS OCCASIONED BY THE NEGLIGENCE, INTENTIONAL TORT, INTELLECTUAL PROPERTY INFRINGEMENT, OR FAILURE TO PAY A SUBCONTRACTOR OR SUPPLIER COMMITTED BY THE ARCHITECT OR THE ARCHITECT'S AGENT, CONSULTANT UNDER CONTRACT, OR ANOTHER ENTITY OVER WHICH THE INDEMNITOR EXERCISES CONTROL.

8.2 IF THE CITY DEFENDS AN ACTION, CLAIM, LAWSUIT OR OTHERWISE INCURS ATTORNEY'S FEES AS A RESULT OF AN INDEMNIFIED CLAIM AS STATED ABOVE, ARCHITECT AGREES TO REIMBURSE THE CITY IN PROPORTION TO THE ARCHITECT'S LIABILITY.

8.3. ARCHITECT agrees to and shall contractually require its consultants and subcontractors of any tier to assume the same indemnification obligations to Indemnities as stated herein.

ARTICLE 9. OWNERSHIP OF DOCUMENTS

9.1 **Ownership of Documents.** As long as CITY is current in the payment of all undisputed invoices, all services product prepared by the ARCHITECT, consultants or subconsultants committed by the ARCHITECT or their agent, pursuant to this Agreement, including, but not limited to, all Contract Documents, Plans and Specifications and any computer aided design, shall be the sole and exclusive property of CITY, subject to the ARCHITECT's reserved rights.

9.2 ARCHITECT's technology, including without limitation customary techniques and details, skill, processes, knowledge, and computer software developed or acquired by ARCHITECT, or its Consultants, to prepare and manipulate the data which comprises the instruments of services shall all be and remain the property of the ARCHITECT.

ARTICLE 10. INDEPENDENT CONTRACTOR

10.1 Independent Contractor. The ARCHITECT is an independent contractor and shall not be regarded as an employee or agent of the CITY.

ARTICLE 11. COMPLIANCE WITH FEDERAL, STATE AND LOCAL LAWS

11.1 Compliance with Federal, State and Local Laws. The ARCHITECT shall observe all applicable provisions of the federal, state and local laws and regulations, including those relating to equal opportunity employment.

ARTICLE 12. SAFETY

12.1 Safety. CITY shall inform the ARCHITECT and its employees of any applicable site safety procedures and regulations known to CITY as well as any special safety concerns or dangerous conditions at the site. The ARCHITECT and its employees will be obligated to adhere to such procedures and regulations once notice has been given.

12.2 ARCHITECT shall not have any responsibility for overall job safety at the site. If in ARCHITECT's opinion, its field personnel are unable to access required locations or perform required services in conformance with applicable safety standards, ARCHITECT may immediately suspend performance until such safety standards can be attained. If, within a reasonable time, site operations or conditions are non-compliant with such safety standards, ARCHITECT may, in its discretion, terminate its performance. In termination event, CITY shall pay for services and termination expenses as provided in Article 18.

ARTICLE 13. LITIGATION

13.1 Litigation. At the request of CITY, the ARCHITECT agrees to provide testimony and other evidence in any litigation, hearings or proceedings to which CITY is or becomes a party in connection with the services performed under this Agreement, unless CITY and the ARCHITECT are adverse to one-another in any such litigation.

13.2 Any litigation arising out of this Agreement between CITY and ARCHITECT shall be heard by the State District Courts of Harris County, Texas.

ARTICLE 14. NOTICE

14.1 Notice. All notices to either party by the other shall be deemed to have been sufficiently given when made in writing and delivered in person, by electronic mail, facsimile, certified mail or courier to the address of the respective party or to such other address as such party may designate.

ARTICLE 15. TERMINATION

15.1 Termination. The performance of services may be terminated or suspended by CITY, for any reason. Such termination or suspension shall be subject to notice of CITY's election to either suspend or terminate the Agreement fifteen (15) days prior to the effective suspension or termination date. The Notice shall specify the extent to which performance of services is suspended or terminated and the date upon which such action shall become effective. In the event services are terminated or suspended by CITY prior to the completion of services contemplated hereunder, ARCHITECT shall be paid for (i) the services rendered to the date of termination or suspension and, (ii) reasonable services provided to effectuate a professional and timely Project termination or suspension.

ARTICLE 16. SEVERABILITY

16.1 Severability. If any term, covenant, condition or provision of this Agreement is found by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of this Agreement shall remain in full-force and effect, and shall in no way be affected, impaired or invalidated thereby.

ARTICLE 17. WAIVER

17.1 Waiver. Any waiver by either party or any provision or condition of this Agreement shall not be construed or deemed to be a waiver of a subsequent breach of the same provision or condition, unless such waiver is so expressed in writing and signed by the party to be bound.

ARTICLE 18. GOVERNING LAW

18.1 Governing Law. This Agreement will be governed by and construed and interpreted in accordance with the laws of the State of Texas.

ARTICLE 19. CAPTIONS

19.1 Captions. The captions contained herein are intended solely for the convenience of reference and shall not define, limit or affect, in any way, the provisions, terms and conditions hereof or their interpretation.

ARTICLE 20. ENTIRE AGREEMENT

20.1 Entire Agreement. This Agreement, with its Terms and Conditions, listed in the articles above and attachments represent the entire understanding and Agreement between CITY and ARCHITECT, and supersede any and all prior agreements, whether written or oral, and may be amended or modified only by a written amendment signed by both parties.

This Agreement is effective on the last day signed.

**Pierce, Goodwin, Alexander & Linville, Inc.
(PGAL, Inc.)**

Name: _____

Title: _____

Signature: _____

Date: _____

The City of Deer Park

Name: Mr. Jerry Mouton

Title: Mayor, City of Deer Park

Signature: _____

Date: _____

ATTACHMENT A:

Proposal

March 22, 2021

Mr. Adam Ballesteros, P. E.
City Engineer
City of Deer Park
710 East San Augustine
Deer Park, TX 77536
Voice: (281) 478-7244
Email: aballesteros@deerparktx.org

ALEXANDRIA
ATLANTA
AUSTIN
BOCA RATON
CHICAGO
DALLAS/FORT WORTH
DENVER
HOBOKEN
HOUSTON
LAS VEGAS
LOS ANGELES
SALT LAKE CITY
SAN DIEGO

RE: Scope of Services and Fee Proposal
City of Deer Park EOC expansion and PD Renovation Final Design Phase

Dear Mr. Ballesteros:

The office of PGAL is pleased to present this scope of work and fee proposal for the final design of the EOC expansion and police building renovation in Deer Park, Texas. PGAL has previously completed a pre-design and programming study for the facility and we are now prepared to complete the project providing A/E services for schematic design, design development, construction documentation, bidding and construction administration.

PROJECT UNDERSTANDING

The City of Deer Park, with the assistance of PGAL, has defined a viable solution to the City's needs, based on the study, completed and presented to council on December 15, 2020. The study identified and illustrated the need for an approximately 8,500 GSF building expansion to include the relocated EOC, dispatch, and associated support spaces as well as renovations to the records and training areas within the existing police department building. The construction cost for the expansion and renovation is estimated to be approximately \$3,300,000.

SCOPE OF WORK

The previous effort provided a facility program to accurately reflect the needs of the Police department. In the upcoming final design phase of the work PGAL and the A/E team will complete the construction documents for bidding/pricing and provide construction administration services through the completion of the project.

Our consultants for the project will provide civil engineering structural engineering, mechanical electrical and plumbing engineering and landscape design. We have also included basic MEP commissioning based on the requirements of the 2015 IECC as part of the basic services scope of work.

We will provide design for security, telecommunications and audio visual systems. Security system design will include security surveillance cameras, access control devices and associated cabling for the new addition to the building along with records area training room renovations within the existing building. New cameras will be programmed into the new Genetec system. The existing building surveillance camera system and access control system will be reprogrammed to the new Genetec system, and existing cabling and door hardware will be reused within the existing building. We will design and specify the number and locations of telecommunications drops and wireless access points in the new addition and existing building areas to be renovated. Telecommunications equipment racks, grounding, cable management and termination hardware will be specified to meet City of Deer Park – IT standards, including certification of all data lines, and the new telecommunications & radio room will be connected by fiber and copper backbone cabling to the existing. We will coordinate with the Greater Harris County 9-1-1 system administrators to arrange for their equipment to be properly housed in the new telecommunications room based on their standard requirements. Audio/visual systems including equipment, cabling and controls, will be designed and specified for bidding to an audio visual integrator for the new addition and the training room space to be renovated in the existing building. As part of the Audio/Visual scope of work, we will prepare a detailed list of components and equipment needed to describe the overall system and prepare the specification. We will provide this information to the cost estimator for their inclusion in the detailed cost estimate at either the Design Development or 50% CD Phase of the project. If needed more immediately, we can prepare a list of expected costs for the audio/visual system following initial a/v programming meetings.

As requested by the City, the design of a new jail control system with head end located in the new addition IT/Radio/AV room will be included as part of our scope of work. PGAL will coordinate installation and integration of Motorola consoles (radio, controls, viewing, communication, etc.) to function as desired by City of Deer Park Police Department – Dispatch. We will utilize existing cabling, devices, jail doors and hardware, but replace the head end components and programming.

It is anticipated that documentation will be provided for the buildout of all spaces in the EOC, and that the project will be bid out by a Competitive Sealed Proposal delivery method.

COMPENSATION

As requested, we have provided a lump sum fee:

Design Development (30%)	\$ 109,662
Construction Documents (45%)	\$ 164,493
Bid/Negotiating (5%)	\$ 18,277
Construction Administration (20%)	\$ 73,108
Subtotal (100%)	\$365,540

IECC 2015 Commissioning (Code Required)	\$ 1,500
Geotechnical Investigation & Report	\$ 5,000
Site Survey (area of expansion only)	\$ 7,995
Detailed Cost Estimate Update	\$ 4,490
Subtotal	\$ 18,985

Total **\$384,525**

Reimbursable Expenses: PGAL would expect to be reimbursed for any out of pocket expenses we incur on behalf of this project, to include, but not limited to, printing, plotting, photography, permits, fees, special handling or delivery, mileage and travel (if necessary). Reimbursable expenses will be billed at our cost and are estimated not-to-exceed **\$5,000** to complete the project through construction.

Additional Services: If services other than those described above are requested and approved by the City of Deer Park, they will be billed in addition to the above compensation in accordance with PGAL's personnel rate schedule for 2021. Additional Services include but are not limited to the following:

Any design consultants other than those specifically included
Design of off-site work
Design of a traffic signal
Traffic study
Energy Code certification
Acoustical consulting
Furniture design and specification including dispatch consoles
Professional renderings, models and computer animations
Environmental consulting
Construction materials testing
Revisions to approved documents
LEED consulting or certification fees
Permit fees
Design of radio/communications system, equipment and tower
Design of Motorola consoles for dispatch stations

Mr. Adam Ballesteros, P. E.
City of Deer Park – City Engineer
March 22, 2021
Page 4

Upgrade of surveillance system, software cabling, security cameras in existing building

Design of cell phone booster system for existing building

Design of CATV system for existing building

Design of room technology system for existing building

Terms: PGAL will invoice monthly based on a percentage of project completion. Payments are due within thirty (30) days of receipt of invoice.

PROJECT SCHEDULE

PGAL is prepared to deliver this project in accordance with the following schedule:

- | | |
|--------------------------|------------------------------|
| • Design Development | Apr 15 – Jun 11, 2021 |
| • Construction Documents | Jun 14 – Sept 23, 2021 |
| • Bid/Negotiating | Sept 28 – Nov 23, 2021 |
| • Construction | Dec 12, 2021 – Sept 16, 2022 |

Thank you again for the opportunity to serve the City of Deer Park. PGAL looks forward to the commencement and successful completion of this project. Please contact me at 713-622-1444 should you have any questions or comments regarding this proposal.

Sincerely,



Paul D. Bonnette, AIA
Principal

CC: Accounting, File – PGAL

ATTACHMENT B:

Schedule of Rates

PGAL, INC.
HOURLY RATE SCHEDULE

DISCIPLINE	RATE
DIRECTOR	\$290.00
PRINCIPAL	\$250.00
PROJECT MANAGER VI	\$245.00
PROJECT MANAGER V	\$225.00
PROJECT MANAGER IV	\$215.00
PROJECT MANAGER III	\$205.00
PROJECT MANAGER II	\$190.00
PROJECT MANAGER I	\$185.00
SENIOR ARCHITECT VI/ DESIGNER VI/ INTERIOR DESIGNER VI/ ENGINEER VI	\$245.00
SENIOR ARCHITECT V/ DESIGNER V/ INTERIOR DESIGNER V/ ENGINEER V	\$225.00
SENIOR ARCHITECT IV/ DESIGNER IV/ INTERIOR DESIGNER IV/ ENGINEER IV	\$210.00
SENIOR ARCHITECT III/ DESIGNER III/ INTERIOR DESIGNER III/ ENGINEER III	\$200.00
SENIOR ARCHITECT II/ DESIGNER II/ INTERIOR DESIGNER II/ ENGINEER II	\$175.00
SENIOR ARCHITECT I/ DESIGNER I/ INTERIOR DESIGNER I/ ENGINEER I	\$165.00
ARCHITECT IV/ DESIGNER IV/ INTERIOR DESIGNER IV/ ENGINEER IV	\$150.00
ARCHITECT III/ DESIGNER III/ INTERIOR DESIGNER III/ ENGINEER III	\$135.00
ARCHITECT II/ DESIGNER II/ INTERIOR DESIGNER II/ ENGINEER II	\$110.00
ARCHITECT I/ DESIGNER I/ INTERIOR DESIGNER I/ ENGINEER I	\$90.00
BIM MANAGER IV	\$165.00
BIM MANAGER III	\$150.00
BIM MANAGER II	\$130.00
BIM MANAGER I	\$110.00
ENGINEER IN TRAINING III	\$135.00
ENGINEER IN TRAINING II	\$115.00
ENGINEER IN TRAINING I	\$105.00
CONSTRUCTION ADMINISTRATOR IV	\$240.00
CONSTRUCTION ADMINISTRATOR III	\$225.00
CONSTRUCTION ADMINISTRATOR II	\$200.00
CONSTRUCTION ADMINISTRATOR I	\$190.00
CONSTRUCTION INSPECTOR	\$170.00
PROJECT ADMINISTRATOR IV	\$140.00
PROJECT ADMINISTRATOR III	\$130.00
PROJECT ADMINISTRATOR II	\$110.00
PROJECT ADMINISTRATOR I	\$90.00
ADMINISTRATOR III	\$80.00
ADMINISTRATOR II	\$70.00
ADMINISTRATOR I	\$60.00

RATES INCLUDE ALL MARKUPS FOR OVERHEAD/ BURDEN/ FEES/ ETC./ AND WILL REMAIN IN EFFECT UNTIL DECEMBER 2021.

The Texas Board of Architectural Examiners has jurisdiction over complaints regarding the professional practices of persons registered as [architects/landscape architects/registered interior designers] in Texas." Also required is the Board's mailing address and phone number, which are: 333 Guadalupe Street, Suite 2-350, Austin, Texas 78701 and 512-305-9000.

ATTACHMENT C:

Certificate of Liability Insurance

ACORD™

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

8/12/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer any rights to the certificate holder in lieu of such endorsement(s).

PRODUCER USI Southwest 9811 Katy Freeway, Suite 500 Houston, TX 77024 713 490-4600	CONTACT NAME: Shelly Brandman/Michelle Weweh PHONE (A/C, No, Ext): 713 490-4600 FAX (A/C, No): E-MAIL ADDRESS: shelly.brandman@usi.com														
INSURED Pierce Goodwin Alexander & Linville, Inc PGAL, Inc.; PGAL, LLC 3131 Briarpark Drive, Suite 200 Houston, TX 77042	<table border="1"> <thead> <tr> <th data-bbox="816 426 1433 453">INSURER(S) AFFORDING COVERAGE</th> <th data-bbox="1433 426 1572 453">NAIC #</th> </tr> </thead> <tbody> <tr> <td data-bbox="816 453 1433 483">INSURER A : Continental Casualty Company</td> <td data-bbox="1433 453 1572 483">20443</td> </tr> <tr> <td data-bbox="816 483 1433 512">INSURER B : Continental Insurance Company</td> <td data-bbox="1433 483 1572 512">35289</td> </tr> <tr> <td data-bbox="816 512 1433 541">INSURER C : Valley Forge Insurance Company</td> <td data-bbox="1433 512 1572 541">20508</td> </tr> <tr> <td data-bbox="816 541 1433 571">INSURER D : Berkley Insurance Company</td> <td data-bbox="1433 541 1572 571">32603</td> </tr> <tr> <td data-bbox="816 571 1433 600">INSURER E : Transportation Insurance Company</td> <td data-bbox="1433 571 1572 600">20494</td> </tr> <tr> <td data-bbox="816 600 1433 634">INSURER F :</td> <td data-bbox="1433 600 1572 634"></td> </tr> </tbody> </table>	INSURER(S) AFFORDING COVERAGE	NAIC #	INSURER A : Continental Casualty Company	20443	INSURER B : Continental Insurance Company	35289	INSURER C : Valley Forge Insurance Company	20508	INSURER D : Berkley Insurance Company	32603	INSURER E : Transportation Insurance Company	20494	INSURER F :	
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COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	☒ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☒ PRO-JECT ☒ LOC OTHER:			6043241375	08/12/2020	08/12/2021	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$1,000,000 MED EXP (Any one person) \$5,000 PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$2,000,000 PRODUCTS - COMP/OP AGG \$2,000,000 \$
B	AUTOMOBILE LIABILITY ☐ ANY AUTO OWNED AUTOS ONLY ☒ HIRED AUTOS ONLY ☐ SCHEDULED AUTOS NON-OWNED AUTOS ONLY			6043241330	08/12/2020	08/12/2021	COMBINED SINGLE LIMIT (Ea accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
B	☒ UMBRELLA LIAB ☒ OCCUR ☐ EXCESS LIAB ☐ CLAIMS-MADE ☐ DED ☒ RETENTION \$10,000			6043241361	08/12/2020	08/12/2021	EACH OCCURRENCE \$14,000,000 AGGREGATE \$14,000,000 \$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE/OFFICER/MEMBER EXCLUDED? ☒ Y ☒ N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		N/A	643241344	08/12/2020	08/12/2021	☒ PER STATUTE ☐ OTHER E.L. EACH ACCIDENT \$1,000,000 E.L. DISEASE - EA EMPLOYEE \$1,000,000 E.L. DISEASE - POLICY LIMIT \$1,000,000
D	Professional Liability			AEC903876906	08/12/2020	08/12/2021	\$5,000,000 Per Claim
E	Workers Comp - CA			643241358	08/12/2020	08/12/2021	\$5,000,000 Annl Aggr. See Description

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

California Workers Compensation:

Each Accident Limit: \$1,000,000

Policy Limit: \$1,000,000

Each Employee Limit: \$1,000,000

(See Attached Descriptions)

CERTIFICATE HOLDER

CANCELLATION

City of Deer Park 710 E. San Augustine Deer Park, TX 77536-0000	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 
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DESCRIPTIONS (Continued from Page 1)

All policies listed (except for Work Comp and Professional Liab) include an automatic Additional Insured endorsement that provides Additional Insured status to the Certificate Holder only when there is a written contract that requires such status, and only regarding work performed on behalf of the named insured.

Coverage provided on the General Liability is primary and non-contributory if required by written contract executed prior to a loss.

All policies listed provide a Blanket Waiver of Subrogation as required by written contract executed prior to a loss, except as prohibited by law.

All policies listed include an endorsement providing that 30 days notice of cancellation for reasons other than nonpayment of premium and 10 days notice of cancellation for non-payment of premium will be given to the Certificate Holder by the Insurance Carrier, if required by written contract.

The Umbrella Liability policy follows form to the underlying General and Automobile Liability, and Workers Compensation policies.

Insured does not own any autos.