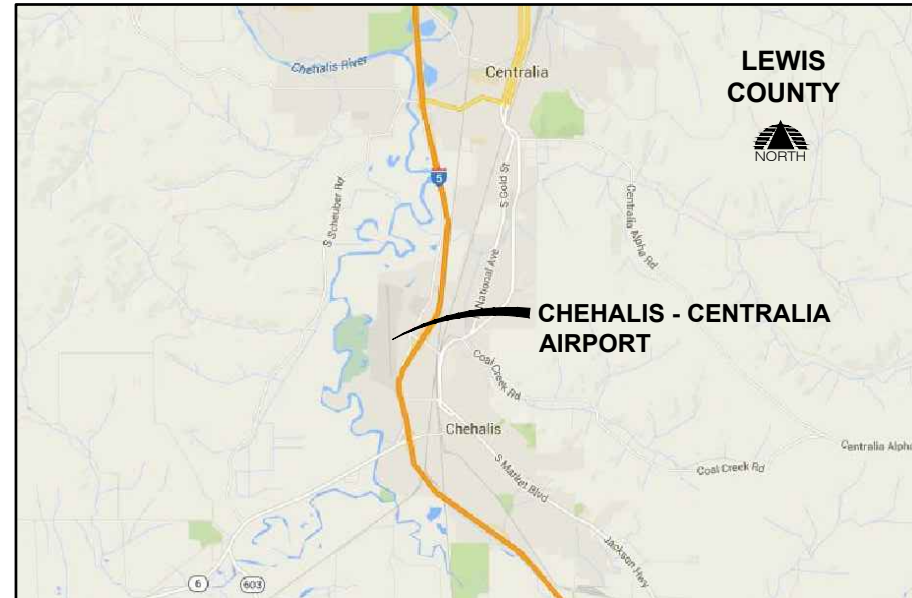
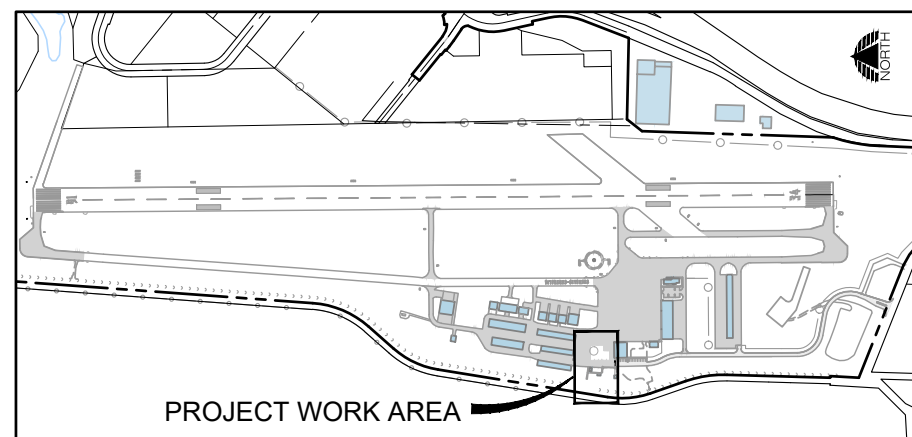


CHEHALIS - CENTRALIA AIRPORT FUELING APRON SITE IMPROVEMENTS

VICINITY MAP



PROJECT MAP



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PETERSON STRUCTURAL ENGINEERS

- S1 GENERAL NOTES AND TANK FOUNDATION PLAN AND SECTION

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CHEHALIS - CENTRALIA AIRPORT
FUELING APRON SITE IMPROVEMENTS

COVER SHEET

PRECISION APPROACH ENGINEERING, INC.

PROJECT NUMBER:
CHE003
SHEET NO.
1
OF **23**

LEGEND

CIVIL SYMBOLS LEGEND

EXISTING	NEW	
		EDGE OF PAVEMENT
		EDGE OF GRAVEL
		CONTOUR
		DITCH FLOW LINE
		FENCE
		STORM DRAIN
		UNDER DRAIN
		CULVERT
		SANITARY SEWER
		WATER
		GAS
		TELEPHONE
		IRRIGATION
		SLOPE SYMBOL
		CATCH BASIN
		STORM DRAIN MANHOLE
		CLEANOUT
		CULVERT END STRUCTURE
		SURFACE FLOW DIRECTION
		SANITARY MANHOLE
		FIRE HYDRANT
		WATER METER
		WATER VAULT
		WATER VALVE
		IRRIGATION VALVE
		TIE DOWN
		SIGN
		SURVEY CONTROL POINT
		SURVEY FOUND MONUMENT
		BRASS CAP
		BENCHMARK
		AIRPORT BEACON
		SHRUBS
		TREES
		ABANDONED FEATURE LINE
		DEMO FEATURE LINES

ELECTRICAL LEGEND

EXISTING	NEW	
		HANDHOLE
		POWER VAULT
		DUCT MARKER
		JUNCTION CAN
		ELECTRICAL RISER
		RUNWAY EDGE LIGHT AND THRESHOLD LIGHT
		C = CLEAR R = RED G = GREEN Y = YELLOW O = OPAQUE
		RUNWAY LIGHT IN PAVEMENT (FLUSH MOUNT)
		REIL (RUNWAY END IDENTIFIER LIGHT)
		PAPI (PRECISION APPROACH PATH INDICATOR)
		TAXIWAY LIGHT (BLUE LENS)
		TAXIWAY LIGHT IN PAVEMENT (FLUSH MOUNT)
		RETROREFLECTIVE MARKER
		POWER CIRCUIT / OVERHEAD
		POWER UNDERGROUND
		POWER POLE
		GUY WIRE
		STREET LIGHT
		GUIDANCE SIGN

BASE BID

BID ITEM NUMBER	DESCRIPTION	UNIT	ESTIMATED QUANTITY	CONSTRUCTION QUANTITY
1	MOBILIZATION	LS	1	
2	CONSTRUCTION SURVEYING AND STAKING	LS	1	
3	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	1	
4	REMOVAL OF CONDUIT AND WIRE	LS	1	
5	ABANDON EXISTING FUEL TANKS IN-PLACE	LS	1	
6	ROADWAY EXCAVATION INCL. HAUL	CY	570	
7	UNSUITABLE FOUNDATION EXCAVATION INCL. HAUL	CY	180	
8	CONSTRUCTION GEOTEXTILE FOR SOIL STABILIZATION	SY	1,050	
9	CRUSHED SURFACING TOP COURSE	TON	400	
10	BALLAST	TON	310	
11	BALLAST FOR UNSUITABLE FOUNDATION EXCAVATION BACKFILL	TON	350	
12	LONGITUDINAL JOINT SEAL	LF	380	
13	HMA CL. 1/2 INCH PG 64-22	TON	190	
14	CEMENT CONC. PAVEMENT	CY	110	
15	FUEL TANK FOUNDATION	EA	4	
16	SOLID WALL PVC STORM SEWER PIPE 6 IN. DIAM.	LF	10	
17	SOLID WALL PVC STORM SEWER PIPE 8 IN. DIAM.	LF	260	
18	SLOTTED CHANNEL DRAIN	LF	65	
19	CATCH BASIN TYPE 1P	EA	2	
20	CATCH BASIN TYPE 2 48 IN. DIAM.	EA	1	
21	CONNECTION TO DRAINAGE STRUCTURE	EA	1	
22	OIL/WATER SEPARATOR	EA	1	
23	EROSION CONTROL AND WATER POLLUTION PREVENTION	LS	1	
24	CEMENT CONC. FUELING EQUIPMENT PAD	CY	29	
25	CONCRETE FILLED STEEL BOLLARD	EA	35	
26	PAINT LINE	LF	210	
27	REMOVING PAINT LINE	LF	60	
28	No. 3 XHHW-2 CABLE	LF	524	
29	No. 8 XHHW-2 CABLE	LF	131	
30	15A 120V 1-PHASE CIRCUITS - ALL REQUIRED CONDUCTORS	LF	350	
31	50A 3-PHASE CIRCUITS - ALL REQUIRED CONDUCTORS	LF	241	
32	No. 14 AWG CONDUCTOR	LF	355	
33	No. 18 AWG CONDUCTOR	LF	142	
34	3-CONDUCTOR 8771 BELDEN CABLE	LF	23	
35	BELDEN 87760 CABLE	LF	71	
36	MISCELLANEOUS ELECTRICAL EQUIPMENT	LS	1	
37	ELECTRICAL TRENCH, NON-PAVED	LF	310	
38	ELECTRICAL TRENCH, PAVED AREA	LF	80	
39	CONCRETE ENCASEMENT OF DUCT	LF	140	
40	3/4-INCH PVC CONDUIT	LF	430	
41	1-INCH PVC CONDUIT	LF	270	
42	2-INCH PVC CONDUIT	LF	240	
43	MISCELLANEOUS IMC/RMC CONDUIT	LS	1	
44	HAZARDOUS LOCATION SEALING FITTINGS	LS	1	
45	ELECTRICAL HANDHOLE	EA	1	
46	ELECTRICAL JUNCTION CAN	EA	1	

ADDITIVE BID

BID ITEM NUMBER	DESCRIPTION	UNIT	ESTIMATED QUANTITY	CONSTRUCTION QUANTITY
A1	REMOVAL AND BACKFILL OF TWO EXISTING FUEL TANKS	LS	1	

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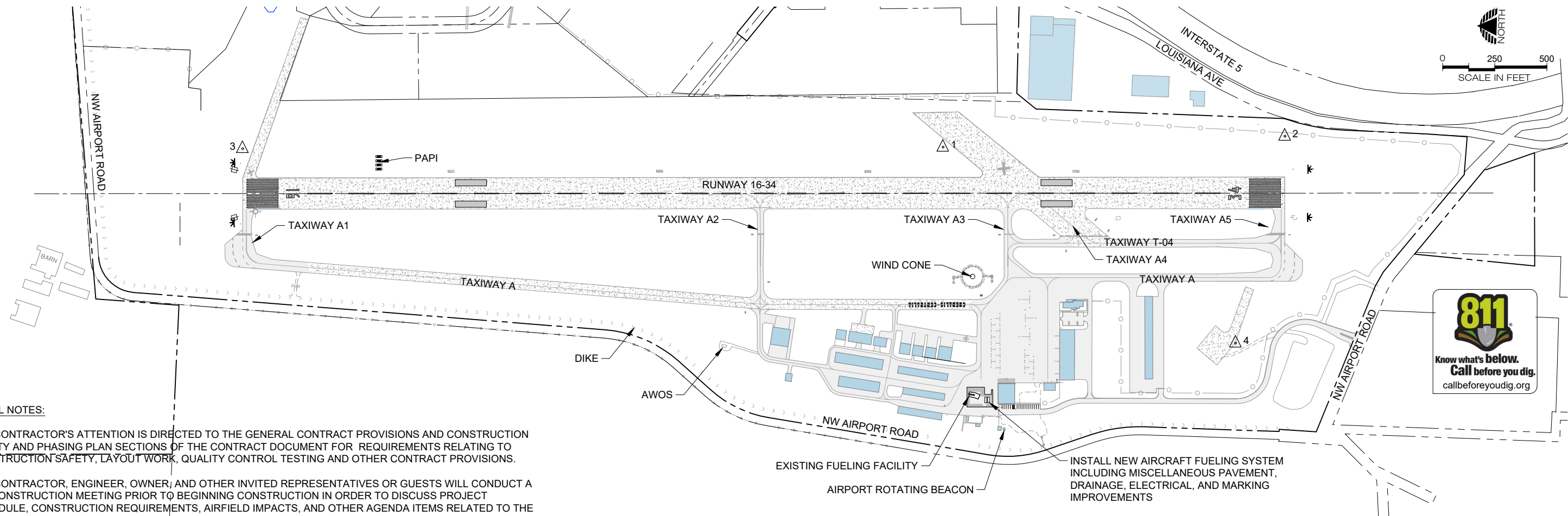
LEGEND AND BID SCHEDULE

PRECISION APPROACH ENGINEERING, INC.

PROJECT NUMBER:
CHE003

SHEET NO.
2

OF **23**



GENERAL NOTES:

1. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE GENERAL CONTRACT PROVISIONS AND CONSTRUCTION SAFETY AND PHASING PLAN SECTIONS OF THE CONTRACT DOCUMENT FOR REQUIREMENTS RELATING TO CONSTRUCTION SAFETY, LAYOUT WORK, QUALITY CONTROL TESTING AND OTHER CONTRACT PROVISIONS.
2. THE CONTRACTOR, ENGINEER, OWNER, AND OTHER INVITED REPRESENTATIVES OR GUESTS WILL CONDUCT A PRECONSTRUCTION MEETING PRIOR TO BEGINNING CONSTRUCTION IN ORDER TO DISCUSS PROJECT SCHEDULE, CONSTRUCTION REQUIREMENTS, AIRFIELD IMPACTS, AND OTHER AGENDA ITEMS RELATED TO THE PROJECT.
3. THE FOLLOWING PERMITS HAVE BEEN OR WILL BE OBTAINED BY THE OWNER, IF REQUIRED:
CONSTRUCTION STORM WATER PERMIT
THE CONTRACTOR SHALL OBTAIN AND PAY FOR ANY ADDITIONAL PERMITS NECESSARY TO COMPLETE THIS PROJECT.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE AND PROTECT ALL UTILITIES DURING THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING THE UTILITY NOTIFICATION CENTER TO LOCATE PUBLIC UTILITIES AND FOR ANY ADDITIONAL UTILITY LOCATES INCLUDING HIRING A PRIVATE LOCATE SERVICE IF REQUIRED. ANY UTILITIES DAMAGED IN CONJUNCTION WITH THE CONSTRUCTION ACTIVITIES SHALL BE REPLACED AND/OR REPAIRED BY THE CONTRACTOR AS APPROVED BY THE OWNER.
5. ALL HAUL ROUTES SHALL BE MAINTAINED DURING CONSTRUCTION AND SHALL BE RESTORED TO ORIGINAL CONDITION BY THE CONTRACTOR UPON COMPLETION OF THE PROJECT. VERIFY CONDITION WITH OWNER PRIOR TO CONSTRUCTION.
6. LIMITS OF WORK SHOWN ON THIS SHEET ARE APPROXIMATE AND SHOW GENERAL AREAS OF WORK. SEE SPECIFIC SHEETS FOR ACTUAL LIMITS OF WORK.

CONSTRUCTION SCHEDULE:

1. THE CONTRACTOR SHALL PREPARE AND SUBMIT A "CONSTRUCTION SCHEDULE" TO THE ENGINEER AND OWNER FOR REVIEW A MINIMUM OF 14 DAYS PRIOR TO STARTING CONSTRUCTION PHASE OR PRIOR TO THE PRECONSTRUCTION CONFERENCE, WHICHEVER OCCURS EARLIER. THE PLAN MUST BE ACCEPTABLE TO THE OWNER PRIOR TO BEGINNING WORK.
2. EACH PHASE OF THE PROJECT WILL HAVE A SEPARATE NOTICE TO PROCEED ASSOCIATED WITH THE WORK. FOLLOWING COMPLETION OF PHASE 1, THE CONTRACTOR SHALL INSTALL ALL NECESSARY SAFETY MEASURES AND DEMOBILIZE FROM SITE UNTIL NEW FUELING EQUIPMENT INSTALLATION IS COMPLETED AND TESTED BY OTHERS. COORDINATION WITH FUEL SYSTEM INSTALLER IS REQUIRED. ONCE NEW FUELING SYSTEM IS OPERATIONAL, THE OWNER WILL ISSUE A NOTICE TO PROCEED FOR PHASE 2 OF THE WORK.
3. THE CONSTRUCTION SCHEDULE SHALL BE REVISED ANY TIME AN ELEMENT OF WORK DOES NOT COINCIDE WITH THE INITIAL TIME LINE PRESENTED OR IF REQUESTED BY THE ENGINEER OR OWNER.

CONTRACTOR'S SUPERINTENDENT AND SAFETY OFFICER:

1. THE CONTRACTOR SHALL HAVE A FULL TIME SUPERINTENDENT ON THE PROJECT SITE ANY TIME WORK IS BEING ACCOMPLISHED ON THE AIRPORT. THIS INCLUDES WORK BEING PERFORMED BY SUBCONTRACTORS OR SERVICE PROVIDERS UNLESS OTHERWISE APPROVED BY THE OWNER.
2. THE CONTRACTOR SHALL ASSIGN ONE PERSON TO BE THE SAFETY OFFICER DURING THE PROJECT. THE SAFETY OFFICER SHALL BE ONSITE AT ALL TIMES WHEN WORK IS OCCURRING IN THE AOA WHEN THE AIRPORT IS OPEN UNLESS OTHERWISE APPROVED BY THE OWNER. THE SAFETY OFFICER SHALL BE RESPONSIBLE FOR THE EDUCATION AND TRAINING OF ALL PERSONNEL WHO WILL ACCESS AIRPORT PROPERTY. THE OFFICER SHALL MAINTAIN RECORDS INDICATING THAT PERSONNEL HAVE BEEN TRAINED AND ARE FAMILIAR WITH SAFETY RULES AND REGULATIONS RELATED TO OPERATIONS AT THE AIRPORT DURING CONSTRUCTION. PERSONNEL WHO VIOLATE SAFETY REQUIREMENTS MAY BE REMOVED FROM THE PROJECT AT THE DISCRETION OF THE OWNER. THE SAFETY OFFICER SHALL ALSO BE RESPONSIBLE FOR FOREIGN OBJECT DEBRIS (FOD) MANAGEMENT.
3. THE CONTRACTOR'S SUPERINTENDENT AND SAFETY OFFICER SHALL ATTEND THE WEEKLY CONSTRUCTION MEETING.

SURVEY CONTROL POINTS

PNT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
△ 1	498947.240	1017562.729	174.55	NGS DISK "DH3810" (SAC)
△ 2	497307.230	1017627.206	173.53	NGS DISK "DH3809" (PAC)
△ 3	502307.867	1017531.889	169.08	NGS DISK "DH3811" (SAC)
△ 4	497536.475	1016632.747	176.07	BRASS DISK "AP 1956 STA A"

HORIZONTAL DATUM - NAD 83 (EPOCH 2011)
NGS CALCULATED WASHINGTON STATE PLANE SOUTH ZONE (4602) COORDINATES
US SURVEY FEET
VERTICAL DATUM - NAVD 88

SURVEY NOTES:

1. HORIZONTAL AND VERTICAL CONTROL SURVEY REFERENCE POINTS ARE PROVIDED FOR CONTROL OF THE PROJECT. ALL LAYOUT AND CONSTRUCTION SURVEYING SHALL BE CONDUCTED BY A COMPANY UNDER THE SUPERVISION OF A PROFESSIONAL LAND SURVEYOR REGISTERED IN WASHINGTON.
2. PRIOR TO BEGINNING ANY LAYOUT, THE CONTRACTOR'S SURVEYOR SHALL OCCUPY ALL REFERENCE CONTROL POINTS SHOWN IN THE TABLE ON THIS SHEET AND VERIFY DATA GIVEN. ANY DISCREPANCY SHALL IMMEDIATELY BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION OR CORRECTION. NOTES SHOWING CONFIRMATION OF THE HORIZONTAL AND VERTICAL IN ACCORDANCE WITH GENERAL CONTRACT PROVISION SECTION 50-06 SHALL BE PROVIDED TO THE ENGINEER PRIOR TO STARTING CONSTRUCTION.

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CHEHALIS - CENTRALIA AIRPORT
FUELING APRON SITE IMPROVEMENTS

SITE PLAN

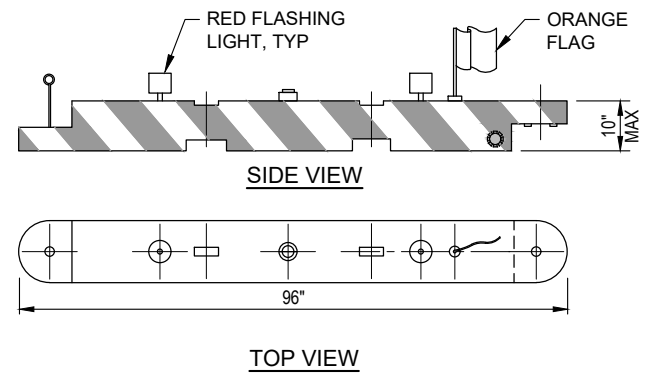
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PROJECT NUMBER:
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SHEET NO.
3

OF **23**

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NOTES:

1. PROVIDE BARRICADE CAPABLE OF BEING FILLED WITH WATER OR SAND. IF ALTERNATE METHOD OF ANCHORING IS USED IT SHALL NOT CAUSE DAMAGE TO PAVEMENT.
2. BARRICADE TO BE CAPABLE OF BEING DEPLOYED BY ONE PERSON WHEN EMPTY.
3. CONTRACTOR SHALL MAINTAIN ALL LIGHTS IN WORKING ORDER FOR THE DURATION OF THE PROJECT. CONTRACTOR SHALL REPLACE FLAGS AS NECESSARY OR AS DIRECTED BY THE ENGINEER DUE TO DETERIORATION.
4. BARRICADES TO BE PROVIDED BY THE CONTRACTOR ARE INCIDENTAL TO THE MOBILIZATION BID ITEM AND ARE PROPERTY OF THE CONTRACTOR UPON COMPLETION OF THE PROJECT.
5. NO CONSTRUCTION SHALL BEGIN UNTIL BARRICADES HAVE BEEN PLACED AND APPROVED BY THE ENGINEER.

PORTABLE PLASTIC BARRICADE DETAIL
NTS



CONSTRUCTION PHASING NOTES

1. EXCEPT FOR CLOSURES NOTED, AIRPORT AND AIR OPERATIONS AREAS (AOAS) TO REMAIN OPEN TO AIRCRAFT OPERATIONS DURING ENTIRE COURSE OF WORK. SEE SPECIFICATIONS AND CONSTRUCTION SAFETY AND PHASING PLAN (CSPP) TEXT FOR ADDITIONAL REQUIREMENTS. CONTRACTOR SHALL COORDINATE WORK TO ASSURE MINIMUM INCONVENIENCE TO AIRPORT OPERATIONS. IN ALL CIRCUMSTANCES SAFETY SHALL TAKE PRECEDENCE.
2. CONTINUOUS ACCESS SHALL BE MAINTAINED FOR ADJACENT HANGAR ACCESS AND BUSINESS OPERATIONS.
3. WORK WITHIN THE TAXILANE OBJECT FREE AREA (TOFA) OR TAXILANE SAFETY AREA (TSA) WILL REQUIRE CLOSURE OR RESTRICTED USE OF IMPACTED TAXILANE. SEE CSPP TEXT FOR ADDITIONAL REQUIREMENTS.
4. THE CONTRACTOR SHALL PROVIDE SUFFICIENT LEAD TIME FOR REQUIRED NOTIFICATIONS WITH PROJECT STAKEHOLDERS AND THE FEDERAL AVIATION ADMINISTRATION. THIS WILL REQUIRE SUBMITTAL OF A PRELIMINARY SCHEDULE TO INCLUDE START DATES FOR INDIVIDUAL PHASES AND DATES FOR AIRPORT FACILITIES IMPACTS WITHIN 15 CALENDAR DAYS AFTER EXECUTION OF THE CONSTRUCTION CONTRACT. A REVISED SCHEDULE WILL BE PREPARED IN CONJUNCTION WITH THE PRECONSTRUCTION MEETING. THE CONTRACTOR SHALL NOTIFY THE OWNER WITH REQUESTS FOR NOTICES TO AIRMEN (NOTAMS) 48 HOURS PRIOR TO IMPLEMENTATION. CONTRACTOR SHALL COORDINATE WITH ENGINEER FOR CONSTRUCTION RELATED AOA CLOSURES. CLOSURES ARE SUBJECT TO APPROVAL BY THE OWNER.
5. CONTRACTOR SHALL DELINEATE LOCATION OF TOFA AT TRAFFIC ACCESS POINTS, AND PROVIDE OTHER FIELD DELINEATION TO SEPARATE CONSTRUCTION ACTIVITIES FROM AIRPORT OPERATIONS AS DIRECTED BY THE ENGINEER. DELINEATION WITHIN THE TOFA SHALL BE LOW PROFILE AND SHALL NOT PRESENT A HAZARD TO AIRCRAFT. CONES, STAKES, OR OTHER METHODS AS APPROVED BY THE ENGINEER MAY BE USED OUTSIDE THE TOFA.
6. BARRICADES, LIGHTS, AND OTHER CONSTRUCTION CONTROL DEVICES FURNISHED, PLACED, AND MAINTAINED BY THE CONTRACTOR SHALL BE PROVIDED AT VARIOUS LOCATIONS, AS NECESSARY TO ADEQUATELY SEPARATE CONSTRUCTION ACTIVITIES FROM THE AOA. BARRICADES SHOWN ON THE DRAWINGS ARE FOR REFERENCE AND THE NUMBER AND LOCATION OF BARRICADES MAY CHANGE TO MEET SAFETY REQUIREMENTS.
7. PRIOR TO REOPENING A CLOSED TAXILANE, OR APRON AREA FOR OPERATIONS THE CONTRACTOR SHALL PROVIDE ADEQUATE TIME FOR THE ENGINEER OR OWNER TO INSPECT FOR CLEANLINESS AND CONFORMANCE TO REGULATIONS INCLUDING GRADING REQUIREMENTS OF THE TAXILANE SAFETY AREA (TSA). THE TIME NEEDED FOR INSPECTION AND POSSIBLE NECESSARY CORRECTIVE ACTION SHALL BE INCLUDED WITHIN THE ALLOWED CLOSURE PERIOD.
8. WORK AREAS SHOWN IN PHASING PLANS ARE APPROXIMATE. SEE APPROPRIATE DRAWINGS FOR SPECIFIC WORK LIMITS. CONTRACTOR SHALL COORDINATE ALL WORK ELEMENTS COMPATIBLE WITH INTENDED PHASE UNLESS OTHERWISE APPROVED BY THE ENGINEER OR OWNER.
9. AIRCRAFT OPERATIONS ROUTES SHOWN ARE APPROXIMATE AND ARE NOT LIMITED TO LOCATIONS SHOWN. CONTRACTOR SHALL REMAIN CLEAR OF AIRCRAFT OPERATIONS AT ALL TIMES.
10. CONTRACTOR SHALL NOT BLOCK VEHICLE ACCESS ROADS OR GATES AT ANY TIME.
11. LOCATION OF THE CONTRACTOR'S STAGING AREAS ARE APPROXIMATE. VERIFY LIMITS AND LOCATIONS WITH ENGINEER PRIOR TO MOBILIZATION.
12. ALL VEHICLES NOT ESSENTIAL FOR CONSTRUCTION, INCLUDING CONTRACTOR-EMPLOYEE VEHICLES SHALL REMAIN OUTSIDE OF AIR OPERATIONS AREA. PARKING SHALL BE CONFINED TO THE CONTRACTOR'S STAGING AREA.
13. ALL PORTIONS OF WORK NOT COVERED BY PAYMENT UNDER A SPECIFIC BID ITEM OR LISTED AS INCIDENTAL TO A BID ITEM SHALL BE CONSIDERED INCIDENTAL TO THE MOBILIZATION BID ITEM.
14. THE CONTRACTOR SHALL USE AND MONITOR THE AIRPORT'S COMMON TRAFFIC ADVISORY FREQUENCY (CTAF), 122.800 MHZ.
15. ALL HAUL ROUTES SHALL BE MAINTAINED DURING CONSTRUCTION AND SHALL BE RESTORED TO ORIGINAL CONDITION BY CONTRACTOR UPON COMPLETION OF THE PROJECT. VERIFY CONDITION WITH OWNER AND ENGINEER PRIOR TO CONSTRUCTION.
16. ALL CONSTRUCTION EQUIPMENT MUST BE MARKED WITH A 3 FOOT BY 3 FOOT ORANGE AND WHITE CHECKERED FLAG AND/OR AMBER BEACON PLACED AT THE HIGHEST POINT ON THE EQUIPMENT. ALL CONSTRUCTION VEHICLES MUST BE CLEARLY MARKED WITH THE COMPANY LOGO AT ALL TIMES.



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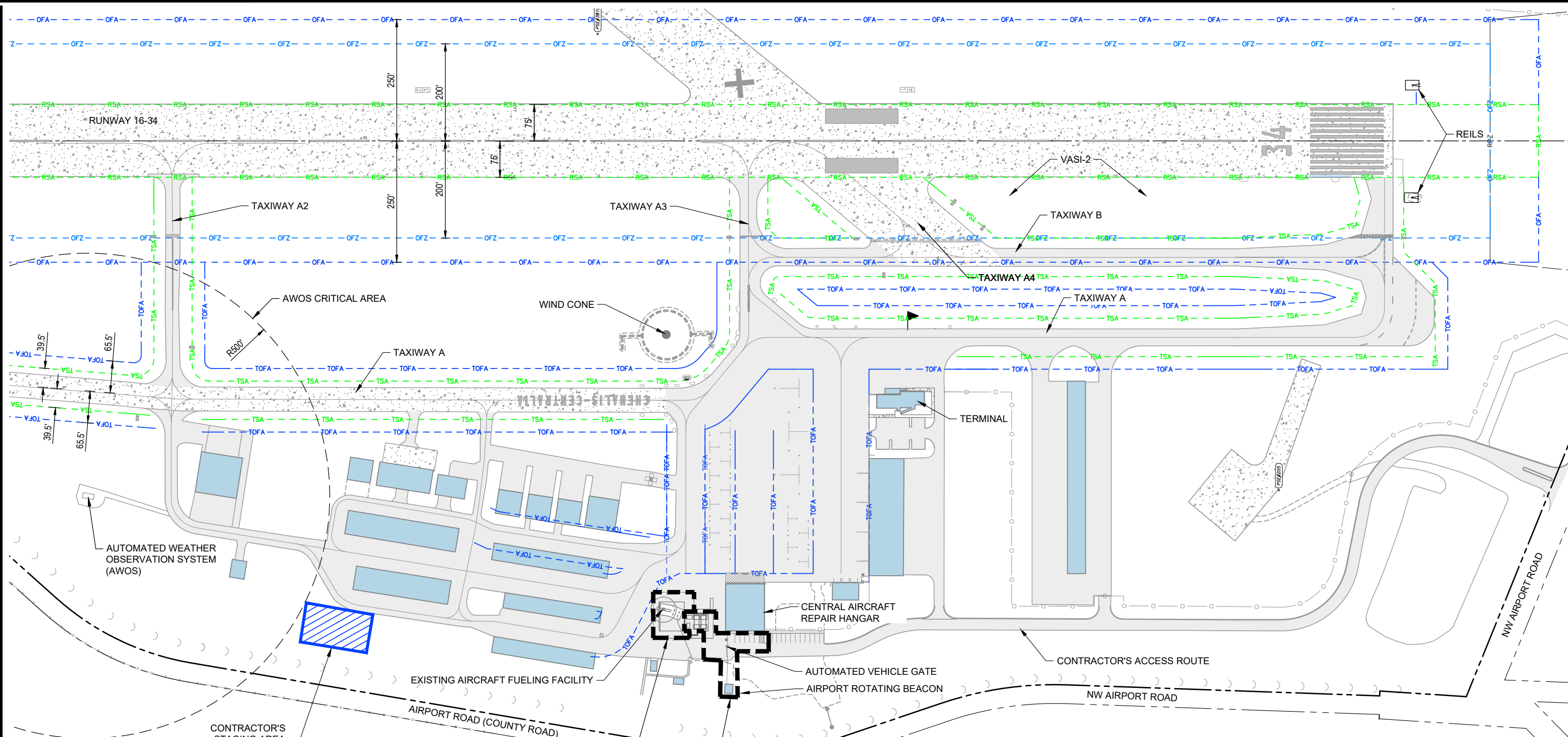
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FUELING APRON SITE IMPROVEMENTS

**CONSTRUCTION PLAN -
GENERAL NOTES AND DETAILS**

PRECISION APPROACH ENGINEERING, INC.

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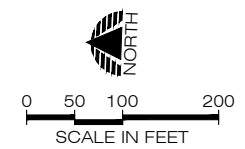


PHASE 2 APPROXIMATE WORK LIMITS.
SEE CONSTRUCTION - PHASE 2 DRAWING AND
CONSTRUCTION PLAN GENERAL NOTE 8,
SHEET 4 FOR ADDITIONAL REQUIREMENTS

PHASE 1 APPROXIMATE WORK LIMITS.
SEE CONSTRUCTION - PHASE 1 DRAWING AND
CONSTRUCTION PLAN GENERAL NOTE 8,
SHEET 4 FOR ADDITIONAL REQUIREMENTS

AIRFIELD CRITICAL AREAS LEGEND

- - - - - RSA - - - - - RSA - - - - - RUNWAY SAFETY AREA (RSA)
- - - - - OFZ - - - - - OFZ - - - - - RUNWAY OBSTACLE FREE ZONE (OFZ)
- - - - - OFA - - - - - OFA - - - - - RUNWAY OBJECT FREE AREA (OFA)
- - - - - TSA - - - - - TSA - - - - - TAXIWAY SAFETY AREA (TSA)
- - - - - TOFA - - - - - TOFA - - - - - TAXIWAY OBJECT FREE AREA (TOFA)



NOTE:
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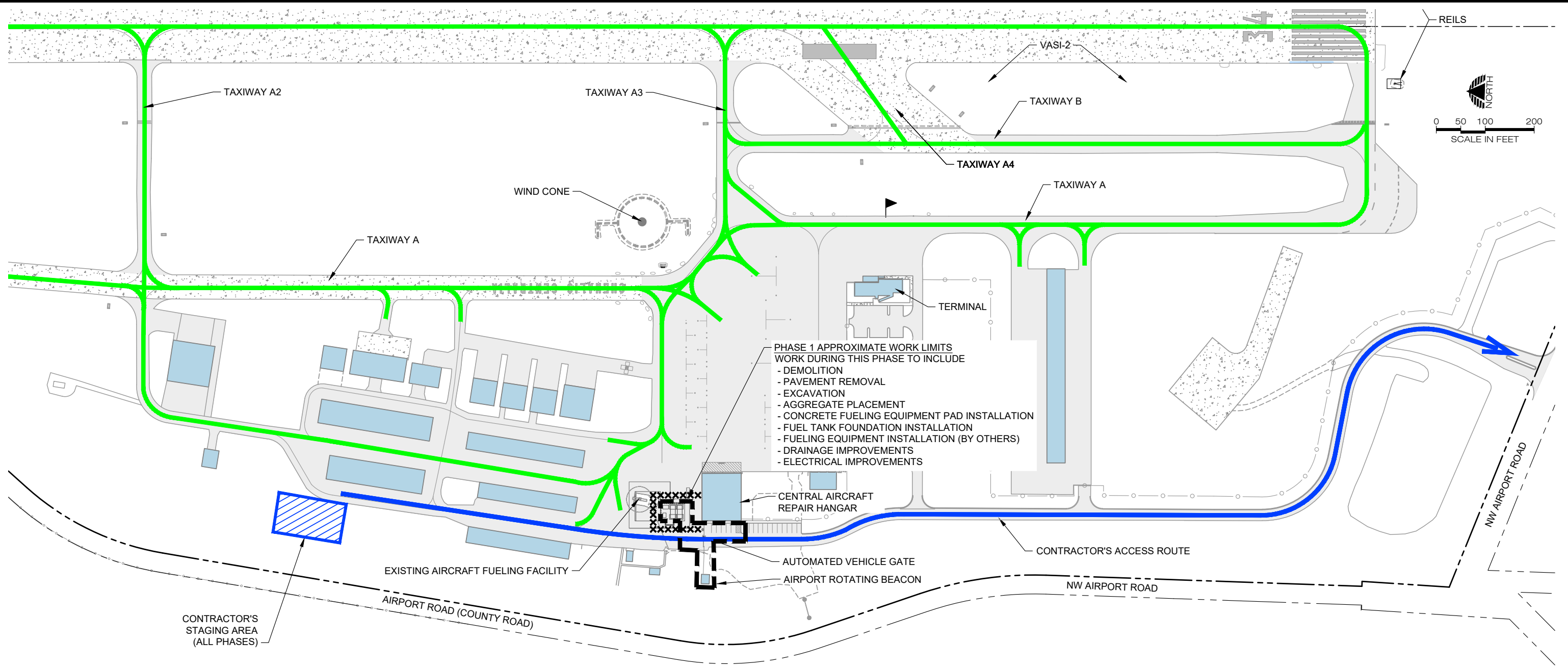
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CHEHALIS - CENTRALIA AIRPORT
FUELING APRON SITE IMPROVEMENTS

**CONSTRUCTION PLAN - PROJECT
SPECIFIC CRITICAL AREAS**

PRECISION APPROACH ENGINEERING, INC.

PROJECT NUMBER:	CHE003
SHEET NO.	5
OF	23



PROJECT CONSTRUCTION TIME

WORK ELEMENTS TO COINCIDE WITH CLOSURE AREAS IDENTIFIED IN CONSTRUCTION PLANS
 ALL ELEMENTS OF WORK TO BE COMPLETED WITHIN THE TOTAL PROJECT CALENDAR DAY COUNT.

PHASE	AIR OPERATIONS AREA (AOA) IMPACT, SEE GENERAL NOTE 3, SHEET 4	ALLOWABLE DAILY WORK PERIOD, (LOCAL TIME). SEE NOTE A	MAXIMUM NUMBER OF CALENDAR DAYS ALLOWED, SEE NOTE B
1	PARTIAL TAXILANE AND APRON CLOSURE	07:00 - 19:00	28
2	PARTIAL TAXILANE AND APRON CLOSURE	07:00 - 19:00	28 (SEE NOTE C)

- NOTES:
- A. UNLESS OTHERWISE APPROVED BY THE ENGINEER.
 - B. TAXILANES AND AIR OPERATIONS AREA (AOA) IMPACTS WILL BE FOR THE NUMBER OF DAYS INDICATED.
 - C. IF ADDITIVE BID SCHEDULE IS SELECTED FOR CONSTRUCTION AN ADDITIONAL 5 CALENDAR DAYS WILL BE PROVIDED TO COMPLETE PHASE 2.
 - D. IF THE CONTRACTOR FAILS TO COMPLETE ANY OF THE PHASES WITHIN THE SPECIFIED TIME PERIOD, LIQUIDATED DAMAGES WILL BE ASSESSED. SEE SPECIFICATIONS.

LEGEND

- AIRCRAFT OPERATIONS, SEE CONSTRUCTION PLAN GENERAL NOTE 8, SHEET 4
- CONSTRUCTION TRAFFIC, SEE CONSTRUCTION PLAN GENERAL NOTE 8, SHEET 4
- PORTABLE LOW PROFILE BARRICADES WITH RED LIGHTS TO BE PLACED BY THE CONTRACTOR DURING RUNWAY, TAXIWAY AND/OR OTHER WORK AREA CLOSURES THIS PHASE OR AS DIRECTED BY THE ENGINEER. MAY REQUIRE ADJUSTMENT DURING CONSTRUCTION ACTIVITIES, SEE CONSTRUCTION SAFETY AND PHASING PLAN AND DETAIL $\frac{1}{4}$
- XXXXX

PHASING NOTES

1. SEE CONSTRUCTION PLAN GENERAL NOTES, SHEET 4, FOR ADDITIONAL REQUIREMENTS.
2. CONTRACTOR SHALL NOT LEAVE OR PLACE FOREIGN OBJECT DEBRIS (FOD) ON OR NEAR ACTIVE AREAS. MATERIALS TRACKED ONTO ACTIVE AREAS SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR.
3. CONTRACTOR SHALL MAINTAIN AIRCRAFT ACCESS TO EXISTING FUEL FACILITY AT ALL TIMES DURING PHASE 1. EXISTING FUEL SYSTEM SHALL REMAIN FULLY OPERATIONAL THROUGHOUT PHASE 1 WORK.
4. FOLLOWING COMPLETION OF PHASE 1, THE CONTRACTOR SHALL INSTALL ALL NECESSARY SAFETY MEASURES AND DEMOBILIZE FROM SITE UNTIL NEW FUELING EQUIPMENT IS INSTALLED AND TESTED BY OTHERS. ONCE NEW FUELING SYSTEM IS OPERATIONAL, CONTRACTOR SHALL COMPLETE PHASE 2 WORK.

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CHEHALIS - CENTRALIA AIRPORT
 FUELING APRON SITE IMPROVEMENTS

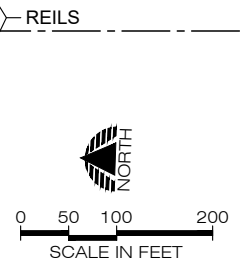
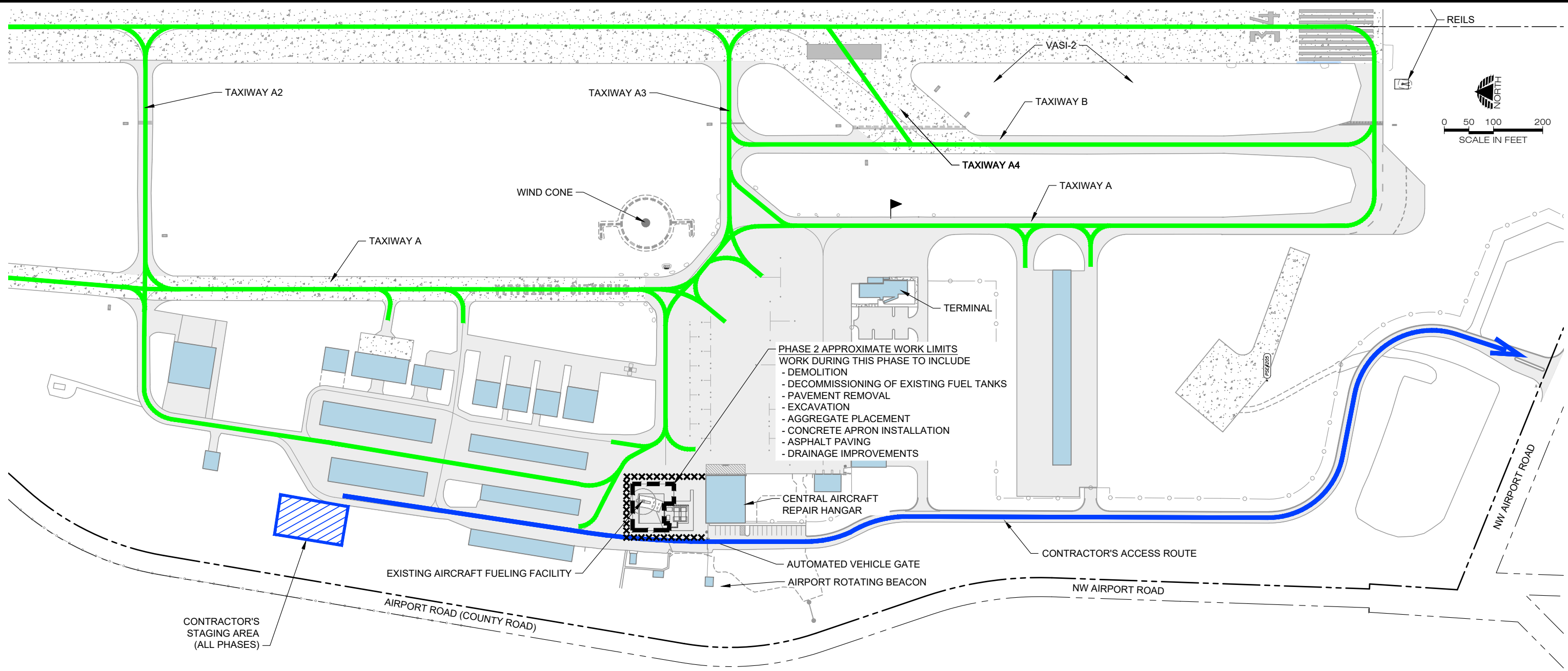
CONSTRUCTION PLAN - PHASE 1

PRECISION APPROACH ENGINEERING, INC.

PROJECT NUMBER:
CHE003

SHEET NO.
6

OF **23**



PHASE 2 APPROXIMATE WORK LIMITS
 WORK DURING THIS PHASE TO INCLUDE
 - DEMOLITION
 - DECOMMISSIONING OF EXISTING FUEL TANKS
 - PAVEMENT REMOVAL
 - EXCAVATION
 - AGGREGATE PLACEMENT
 - CONCRETE APRON INSTALLATION
 - ASPHALT PAVING
 - DRAINAGE IMPROVEMENTS

PROJECT CONSTRUCTION TIME

WORK ELEMENTS TO COINCIDE WITH CLOSURE AREAS IDENTIFIED IN CONSTRUCTION PLANS
 ALL ELEMENTS OF WORK TO BE COMPLETED WITHIN THE TOTAL PROJECT CALENDAR DAY COUNT.

PHASE	AIR OPERATIONS AREA (AOA) IMPACT, SEE GENERAL NOTE 3, SHEET 4	ALLOWABLE DAILY WORK PERIOD, (LOCAL TIME). SEE NOTE A	MAXIMUM NUMBER OF CALENDAR DAYS ALLOWED, SEE NOTE B
1	PARTIAL TAXILANE AND APRON CLOSURE	07:00 - 19:00	28
2	PARTIAL TAXILANE AND APRON CLOSURE	07:00 - 19:00	28 (SEE NOTE C)

- NOTES:
- A. UNLESS OTHERWISE APPROVED BY THE ENGINEER.
 - B. TAXILANES AND AIR OPERATIONS AREA (AOA) IMPACTS WILL BE FOR THE NUMBER OF DAYS INDICATED.
 - C. IF ADDITIVE BID SCHEDULE IS SELECTED FOR CONSTRUCTION AN ADDITIONAL 5 CALENDAR DAYS WILL BE PROVIDED TO COMPLETE PHASE 2.
 - D. IF THE CONTRACTOR FAILS TO COMPLETE ANY OF THE PHASES WITHIN THE SPECIFIED TIME PERIOD, LIQUIDATED DAMAGES WILL BE ASSESSED. SEE SPECIFICATIONS.

LEGEND

- AIRCRAFT OPERATIONS, SEE CONSTRUCTION PLAN GENERAL NOTE 8, SHEET 4
- CONSTRUCTION TRAFFIC, SEE CONSTRUCTION PLAN GENERAL NOTE 8, SHEET 4
- PORTABLE LOW PROFILE BARRICADES WITH RED LIGHTS TO BE PLACED BY THE CONTRACTOR DURING RUNWAY, TAXIWAY AND/OR OTHER WORK AREA CLOSURES THIS PHASE OR AS DIRECTED BY THE ENGINEER. MAY REQUIRE ADJUSTMENT DURING CONSTRUCTION ACTIVITIES, SEE CONSTRUCTION SAFETY AND PHASING PLAN AND DETAIL $\frac{1}{4}$
- XXXXXX

PHASING NOTES

1. SEE CONSTRUCTION PLAN GENERAL NOTES, SHEET 4, FOR ADDITIONAL REQUIREMENTS.
2. CONTRACTOR SHALL NOT LEAVE OR PLACE FOREIGN OBJECT DEBRIS (FOD) ON OR NEAR ACTIVE AREAS. MATERIALS TRACKED ONTO ACTIVE AREAS SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR.
3. CONTRACTOR SHALL MAINTAIN AIRCRAFT ACCESS TO EXISTING FUEL FACILITY AT ALL TIMES DURING PHASE 1. EXISTING FUEL SYSTEM SHALL REMAIN FULLY OPERATIONAL THROUGHOUT PHASE 1 WORK.
4. FOLLOWING COMPLETION OF PHASE 1, THE CONTRACTOR SHALL INSTALL ALL NECESSARY SAFETY MEASURES AND DEMOBILIZE FROM SITE UNTIL NEW FUELING EQUIPMENT IS INSTALLED AND TESTED BY OTHERS. ONCE NEW FUELING SYSTEM IS OPERATIONAL, CONTRACTOR SHALL COMPLETE PHASE 2 WORK.

05/11/21 - 5:12pm - JWade - P:\Cche003-fuel sys\04\CAD\DWG\Sheets\CHE003-Phasing.dwg

NOTE:
 THIS DRAWING IS INTENDED TO BE PRINTED IN COLOR.
 PRINTING IN BLACK AND WHITE MAY REDUCE READABILITY
 AND ALTER ENTITY DEFINITION OR REPRESENTATION.

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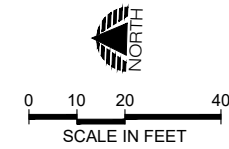
STATE OF WASHINGTON
 PROFESSIONAL ENGINEER
 53638
 05/11/2021

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CHEHALIS - CENTRALIA AIRPORT
 FUELING APRON SITE IMPROVEMENTS
CONSTRUCTION PLAN - PHASE 2
 PRECISION APPROACH ENGINEERING, INC.

PROJECT NUMBER:
CHE003
 SHEET NO.
7
 OF **23**

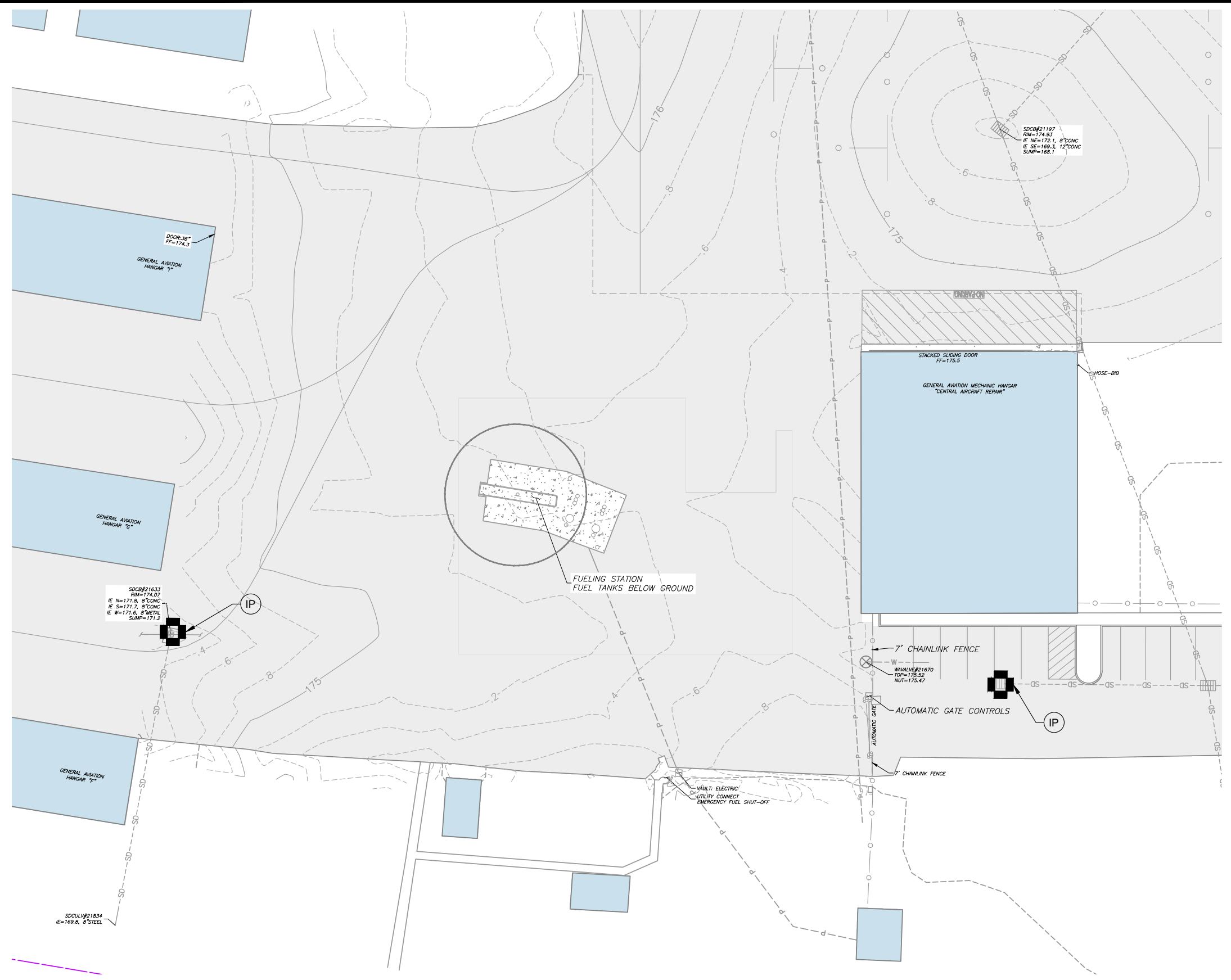


LEGEND - STANDARD PRACTICE CODING SYSTEM

CODE	SYMBOL	DESCRIPTION
IP		STORM DRAIN INLET PROTECTION, SEE DETAIL $\frac{1}{9}$
DC		DUST CONTROL (SPECIFICATIONS P-156)

NOTES

1. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ANY NECESSARY EROSION CONTROL MEASUREMENTS THAT MAY BE REQUIRED BY THE CONTRACTOR'S MEANS AND METHODS OF CONSTRUCTION AS NEEDED TO CONTROL EROSION AND SEDIMENT AT THE CONSTRUCTION SITE AND TO PREVENT VIOLATION OF SURFACE WATER QUALITY, GROUND WATER QUALITY, AND SEDIMENT MANAGEMENT STANDARDS. THIS WORK IS PAID AS PART OF THE TEMPORARY EROSION CONTROL BID ITEM. ALL WORK SHALL BE DONE IN CONFORMANCE WITH WASHINGTON DEPARTMENT OF ECOLOGY REQUIREMENTS.
2. PUBLIC RIGHTS-OF-WAY AND AIRCRAFT OPERATIONS AREAS SHALL BE KEPT IN A CLEAN AND SERVICEABLE CONDITION AT ALL TIMES. IN THE EVENT MATERIALS ARE INADVERTENTLY DEPOSITED ON ROADWAYS, TAXILANES OR APRONS THE MATERIAL SHALL BE PROMPTLY REMOVED. MATERIALS ARE TO BE SWEEPED AND REMOVED PRIOR TO ANY STREET FLUSHING
3. EROSION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE COURSE OF CONSTRUCTION AND UNTIL ALL DISTURBED EARTH IS STABILIZED AT FINISH GRADES. ANY VEGETATED AREAS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE RESEED AT CONTRACTOR'S EXPENSE.
4. EXISTING CATCH BASINS TO BE PROTECTED PRIOR TO DEMOLITION. NEWLY INSTALLED CATCH BASINS TO BE PROTECTED UNTIL WORK IS COMPLETED.
5. IF DIRECTED BY THE ENGINEER, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED.



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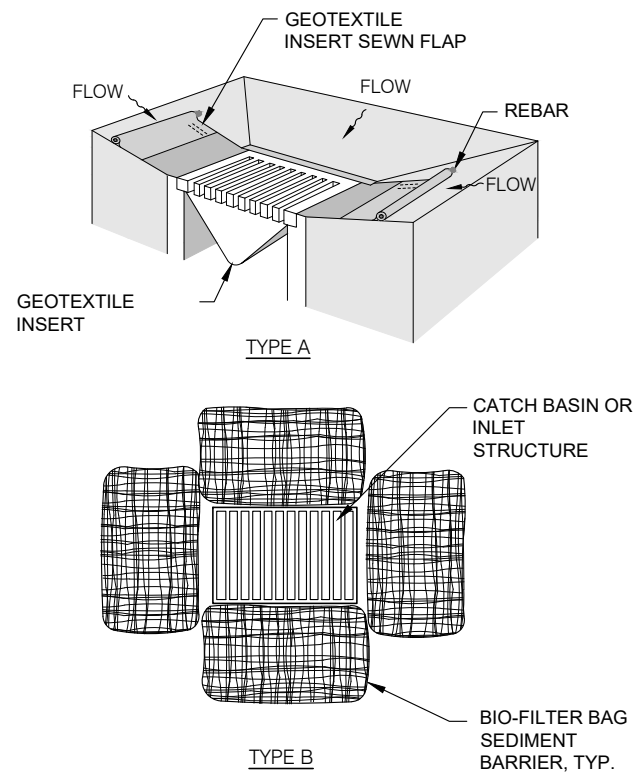
CHEHALIS - CENTRALIA AIRPORT
FUELING APRON SITE IMPROVEMENTS

STORMWATER POLLUTION PREVENTION PLAN

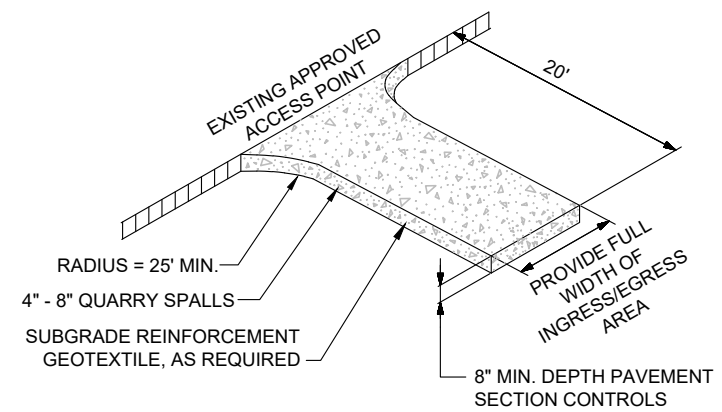
PRECISION APPROACH ENGINEERING, INC.

PROJECT NUMBER:	CHE003
SHEET NO.	8
OF	23

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INLET PROTECTION DETAIL 1
 NTS 9



NOTES:

- CONTRACTOR SHALL USE A STABILIZED CONSTRUCTION ENTRANCE LOCATED PRIOR TO EXISTING ASPHALT ENTRANCES IF SEDIMENT IS TRACKED ONTO PAVEMENT. VERIFY WITH ENGINEER PRIOR TO USE.

STABILIZED CONSTRUCTION ENTRANCE 2
 NTS 9

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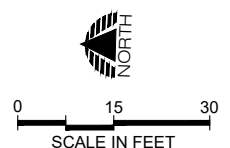
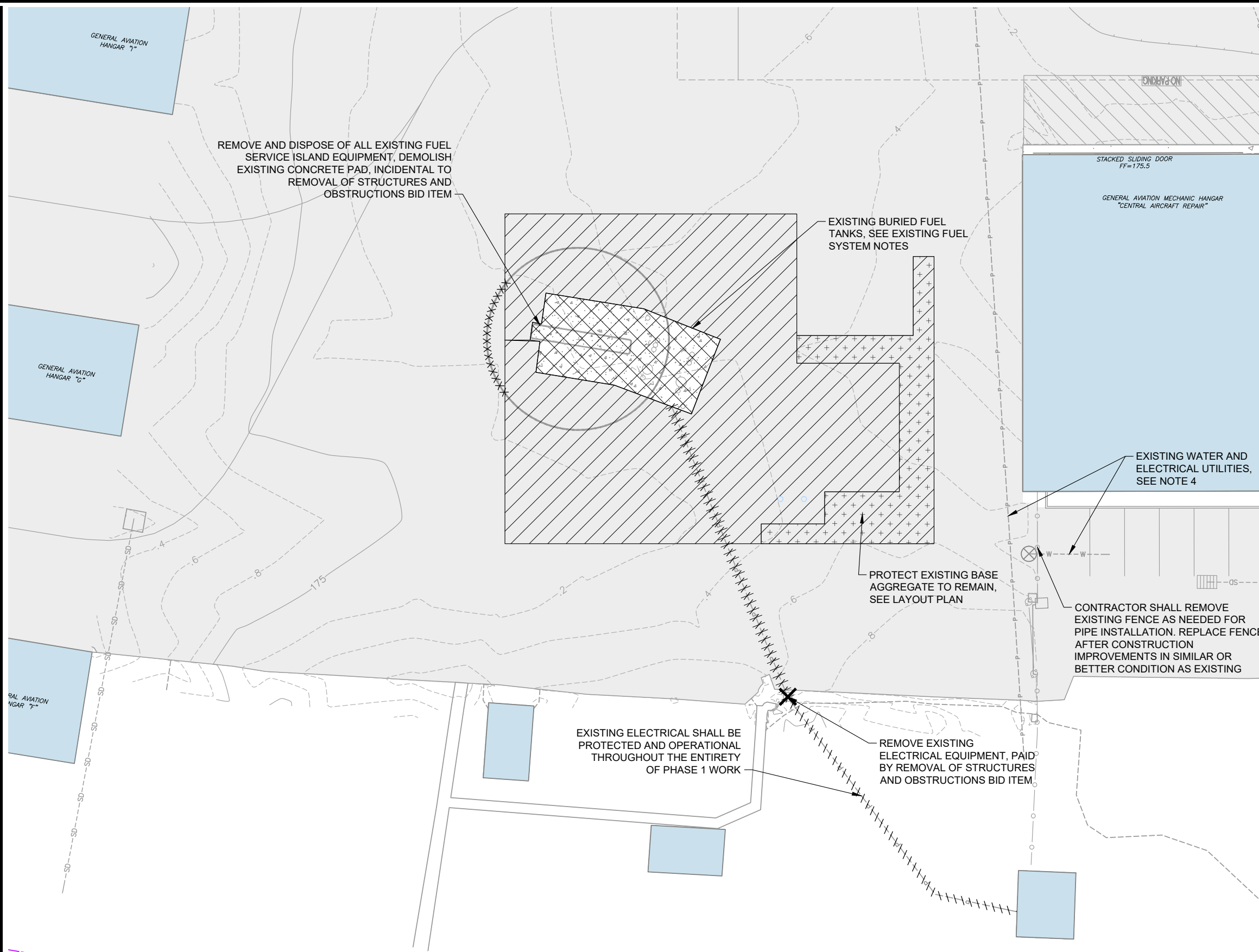
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CHEHALIS - CENTRALIA AIRPORT
 FUELING APRON SITE IMPROVEMENTS
**STORMWATER POLLUTION
 PREVENTION DETAILS**
 PRECISION APPROACH ENGINEERING, INC.

PROJECT NUMBER:
CHE003
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LEGEND

- FULL DEPTH ASPHALT PAVEMENT REMOVAL
- FULL DEPTH CONCRETE PAVEMENT REMOVAL
- XXXXXX · PAVEMENT MARKING REMOVAL, VERIFY LIMITS WITH ENGINEER
- \\\\\\\\\\\\ · REMOVE EXISTING CONDUIT AND CABLE
- ||||| · REMOVE EXISTING CABLE

NOTES

1. LIMITS OF PAVEMENT REMOVAL ARE APPROXIMATE. CONTRACTOR SHALL LAYOUT LIMITS WITH SURVEY AND FIELD VERIFY WITH ENGINEER PRIOR TO REMOVAL. SEE LAYOUT PLAN FOR ADDITIONAL INFORMATION.
2. ALL ELEMENTS OF DEMOLITION UNLESS OTHERWISE NOTED WILL BE DISPOSED OF OFFSITE AND PAID FOR UNDER THE REMOVAL OF STRUCTURES AND OBSTRUCTIONS OR REMOVAL OF CONDUIT AND WIRE BID ITEM.
3. ANY ITEM ENCOUNTERED DURING CONSTRUCTION REQUIRING REMOVAL NOT SHOWN ON PLANS SHALL BE CONSIDERED INCIDENTAL TO REMOVAL OF STRUCTURES AND OBSTRUCTIONS BID ITEM, VERIFY WITH ENGINEER.
4. ALL UTILITY LOCATIONS SHOWN ARE APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY ALL THE UTILITY COMPANIES AND/OR HIRE A PRIVATE LOCATING SERVICE AS NECESSARY TO VERIFY UTILITY LOCATION. THE CONTRACTORS SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL UTILITIES AND REPLACING UTILITIES DAMAGED DURING CONSTRUCTION.
5. ALL AREAS OF PAVEMENT MARKING REMOVAL SHALL BE COATED WITH AN APPROVED SEAL COAT WITHIN THE LIMITS OF THE AREAS DAMAGED OR IMPACTED BY THE REMOVAL PROCESS, NO DIRECT PAYMENT. APPLICATION RATES AND METHOD SHALL BE PER MANUFACTURER'S RECOMMENDATIONS

EXISTING FUEL SYSTEM NOTES

1. AIRPORT WILL PUMP DOWN EXISTING TANKS SO THAT NO MORE THAN APPROXIMATELY 200 GALLONS REMAIN IN THE TANKS AT THE TIME OF ABANDONMENT. CONTRACTOR SHALL BE RESPONSIBLE TO DISPOSE OF REMAINING FUEL IN CONFORMANCE WITH PROJECT REQUIREMENTS.
2. AS PART OF THE BASE BID SCHEDULE, CONTRACTOR SHALL ABANDON EXISTING TANKS IN PLACE. TANKS SHALL BE DECOMMISSIONED AS REQUIRED BY WASHINGTON DEPARTMENT OF ECOLOGY (DOE) REQUIREMENTS. THE CONTRACTOR SHALL COMPLY WITH ALL UNDERGROUND STORAGE TANK (UST) IN PLACE DECOMMISSIONING REGULATIONS. CONTRACTOR SHALL PROVIDE AN ONSITE CERTIFIED ICC SITE ASSESSOR, IF REQUIRED, TO ACCOMPLISH THE DOE IN PLACE UST DECOMMISSIONING REQUIREMENTS. CONTRACTOR SHALL COMPLETE ALL REQUIRED PAPERWORK, FILING, NOTIFICATIONS, AND COORDINATION WITH THE DOE.
3. THE ALTERNATE BID SCHEDULE, IF SELECTED, INCLUDES THE COMPLETE REMOVAL, BACKFILLING, AND DISPOSAL OF TANKS PER WASHINGTON DOE REQUIREMENTS. THE CONTRACTOR SHALL COMPLY WITH ALL UNDERGROUND STORAGE TANK (UST) DECOMMISSIONING REGULATIONS. CONTRACTOR SHALL PROVIDE AN ONSITE CERTIFIED ICC SITE ASSESSOR, IF REQUIRED, TO ACCOMPLISH THE DOE UST DECOMMISSIONING REQUIREMENTS. CONTRACTOR SHALL COMPLETE ALL REQUIRED PAPERWORK, FILING, NOTIFICATIONS, AND COORDINATION WITH THE DOE.

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PROFESSIONAL ENGINEER

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CHEHALIS - CENTRALIA AIRPORT
FUELING APRON SITE IMPROVEMENTS

DEMOLITION PLAN

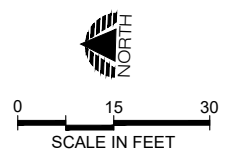
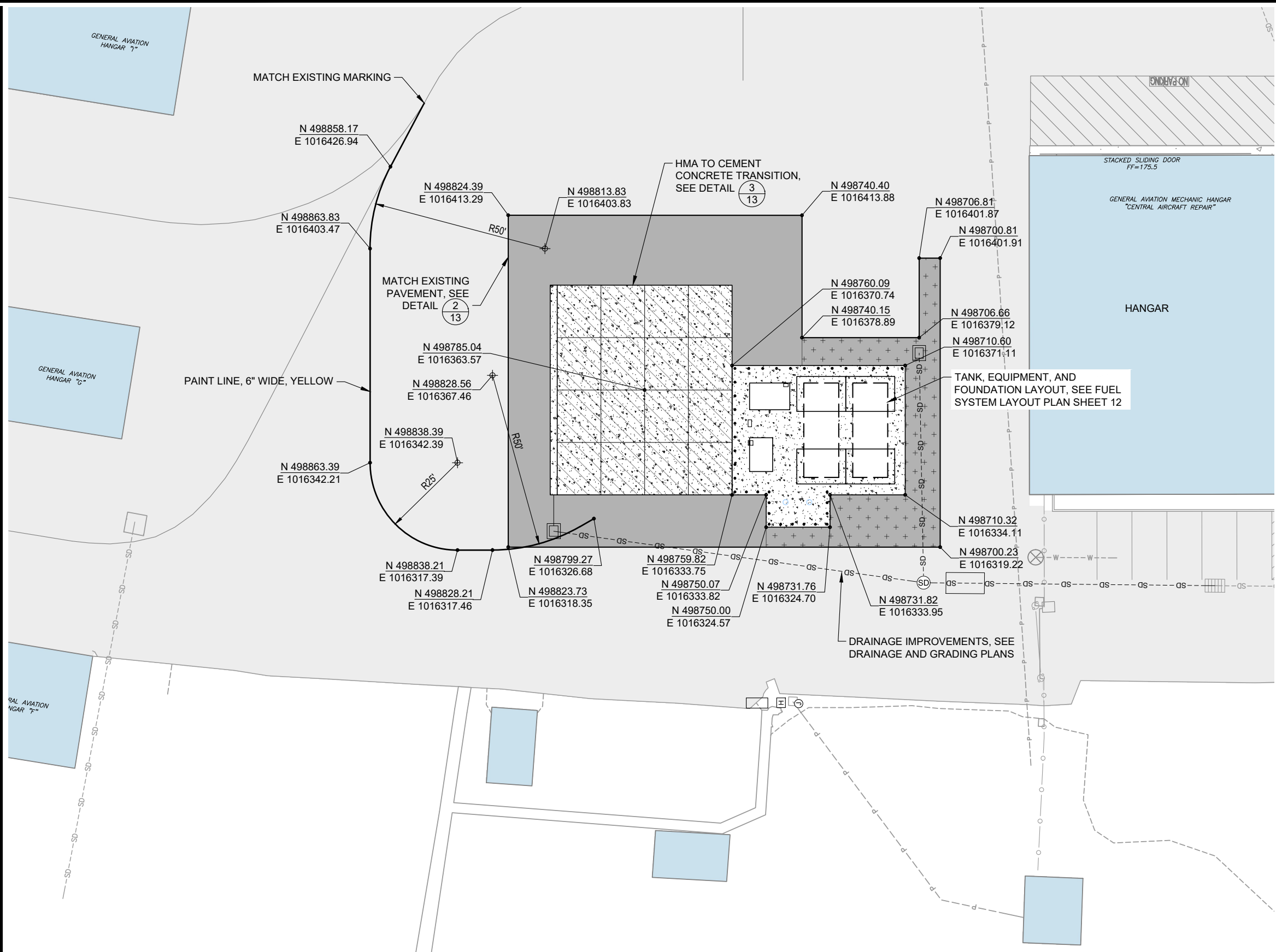
PRECISION APPROACH ENGINEERING, INC.

PROJECT NUMBER:
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OF **23**

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LEGEND

	NEW HMA PAVEMENT SECTION, SEE DETAIL $\frac{1}{13}$
	NEW HMA PAVEMENT ON EXISTING BASE AGGREGATE
	CEMENT CONCRETE PAVEMENT SECTION, SEE DETAIL $\frac{1}{14}$
	CEMENT CONCRETE FUELING EQUIPMENT PAD, SEE DETAIL $\frac{2}{14}$
	EXISTING ASPHALT PAVEMENT

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CHEHALIS - CENTRALIA AIRPORT
 FUELING APRON SITE IMPROVEMENTS

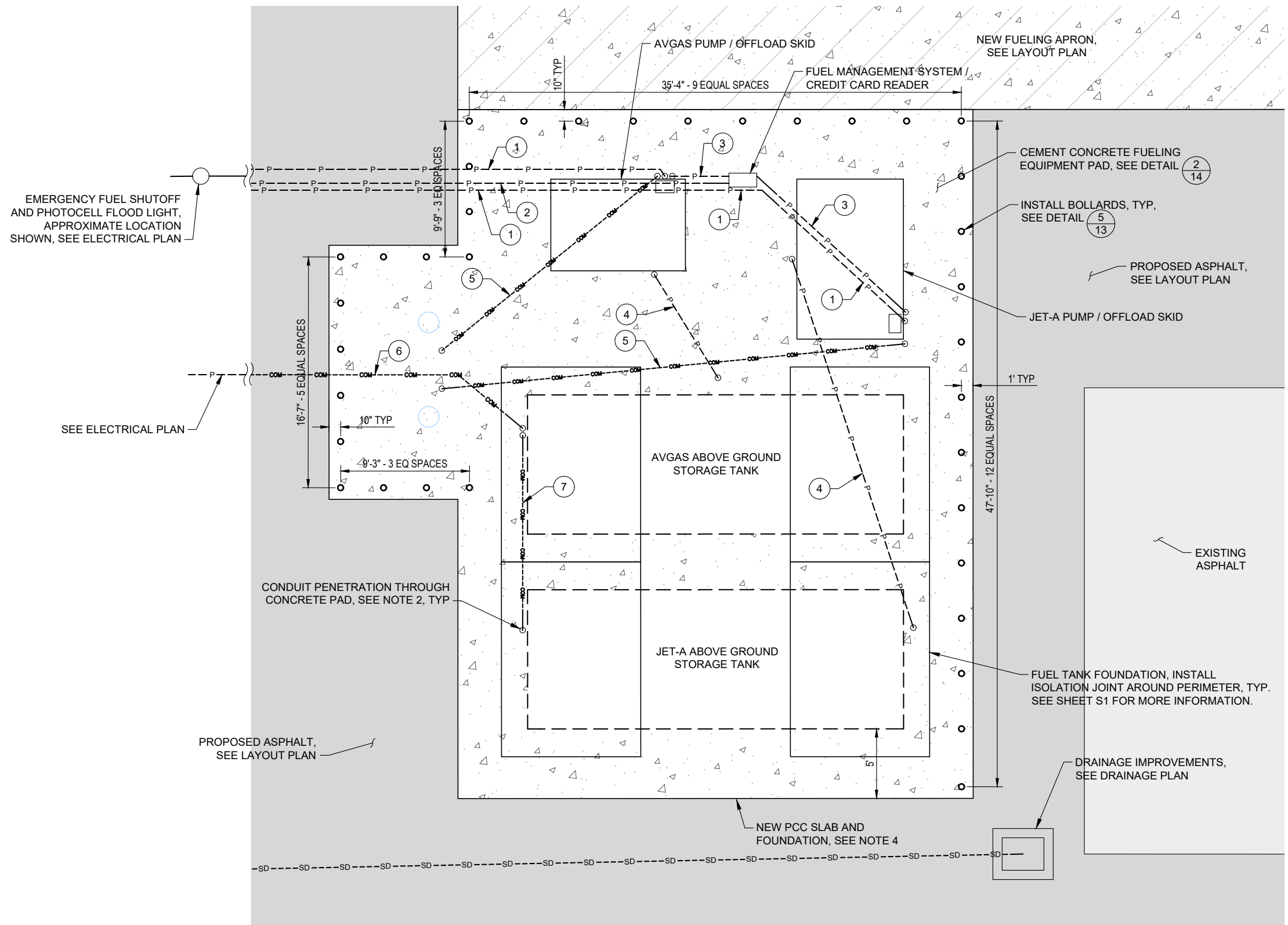
LAYOUT PLAN

PRECISION APPROACH ENGINEERING, INC.

PROJECT NUMBER:
CHE003

SHEET NO.
11

OF **23**



LEGEND

- 1 INSTALL (1) 1" CONDUIT (1) 15AMP 120V CIRCUIT, (1) 50AMP 208 3-PHASE (CONTROL AND PUMP POWER)
- 2 INSTALL (1) 3/4" CONDUIT (1) 15AMP 120V CIRCUIT (CARDLOCK POWER)
- 3 INSTALL (1) 3/4" CONDUIT (7) 14 AWG CONDUCTORS, (1) 3-CONDUCTOR 8771 BELDEN CABLE (CARDLOCK CONTROL AND PULSER)
- 4 INSTALL (1) 3/4" CONDUIT (2) 14 AWG CONDUCTORS, (SUCTION LINE ANTI-SIPHON VALVE)
- 5 INSTALL (1) 3/4" CONDUIT (2) 14 AWG CONDUCTORS, (INTRINSICALLY SAFE CIRCUIT - REMOTE DEADMAN CONTROL)
- 6 INSTALL (1) 3/4" CONDUIT (2) BELDEN 87760 CABLES AND (4) 18 AWG CONDUCTORS (INTRINSICALLY SAFE CIRCUIT - TANK MONITOR)
- 7 INSTALL (1) 3/4" CONDUIT (1) BELDEN 87760 CABLE AND (2) 18 AWG CONDUCTORS (INTRINSICALLY SAFE CIRCUIT - TANK MONITOR)

NOTES

1. CONTRACTOR SHALL VERIFY EMBEDDED ANCHOR BOLT LAYOUT WITH FUELING EQUIPMENT MANUFACTURER PRIOR TO POURING CONCRETE.
2. CONTRACTOR SHALL VERIFY CONDUIT LAYOUT AND LOCATIONS OF CONCRETE SLAB PENETRATIONS WITH ENGINEER PRIOR TO POURING CONCRETE.
3. FUEL TANK AND EQUIPMENT INSTALLATION TO BE COMPLETED BY OTHERS. CONTRACTOR SHALL COORDINATE SCHEDULE OF CONCRETE FOUNDATION AND PAD INSTALLATION WITH FUEL TANK SUPPLIER/INSTALLER.
4. CONTRACTOR SHALL SUBMIT A JOINT LAYOUT PLAN PRIOR TO CONSTRUCTION FOR THE CEMENT CONCRETE FUELING EQUIPMENT PAD, MAXIMUM 10' SPACING.
5. CONTRACTOR SHALL PROVIDE NEC AND NFPA 780 COMPLIANT GROUNDING FOR FUELING EQUIPMENT, INCIDENTAL TO CEMENT CONC. FUELING EQUIPMENT PAD BID ITEM.
6. CONDUIT AND CONDUCTOR SIZES ARE MINIMUMS, CONTRACTOR TO VERIFY CONDUIT SIZE AND WIRE GAUGE.
7. WIRING TO REMOTE DISPLAY SHOULD BE 4-CONDUCTOR 22 GAUGE SHIELDED CABLE (IF EQUIPPED).
8. PULSER WIRING TO BE 3-CONDUCTOR SHIELDED CABLE WITH SHIELD DRAIN WIRE.
9. INTRINSICALLY SAFE WIRING SHALL BE INSTALLED IN ACCORDANCE WITH ARTICLE 504-20 OF THE NEC NFPA 70 2015 (OR CURRENT ADDITION).
10. TO MAINTAIN INTRINSIC SAFETY AND PROPER SYSTEM OPERATION, PROBE AND SENSOR WIRING MUST BE INSTALLED WITHIN SEALED CONDUIT.
11. CONTROL WIRING MUST BE GAS AND OIL RESISTANT SIZE AWG NO. 14. BARRIER GROUND WIRING MUST BE AWG NO. 12 OR LARGER (NO. 10 FOR CARDLOCK SYSTEM).
12. ALL POWER TO CONTROL PANEL MUST BE INTERRUPTED BY EMERGENCY DISCONNECT SHUT-OFF SWITCH. SWITCH MUST BE PLACED WITHIN SIGHT OF THE FUELING AREA, AT LEAST 20' AWAY AND NO FURTHER THAN 100'.
13. ALL ELECTRICAL TO BE PER CURRENT NEC NFPA 70 AND LOCAL REQUIREMENTS.

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CHEHALIS - CENTRALIA AIRPORT
FUELING APRON SITE IMPROVEMENTS

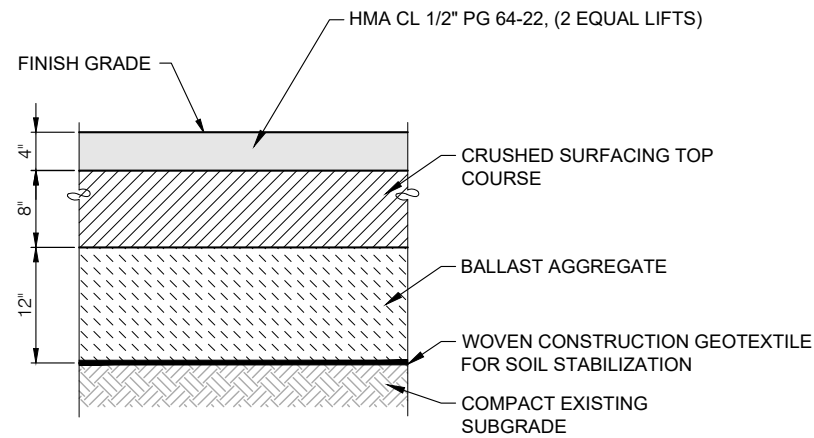
LAYOUT PLAN - FUEL SYSTEM

PRECISION APPROACH ENGINEERING, INC.

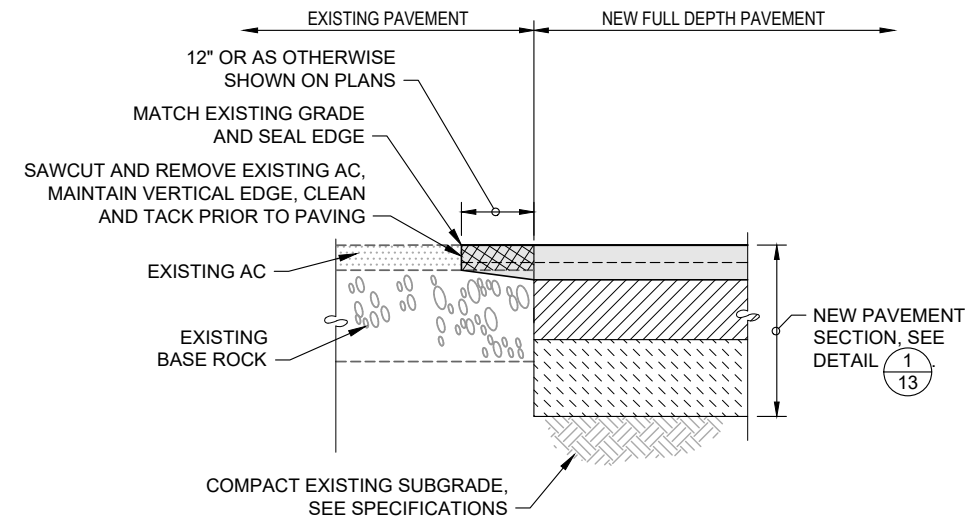
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CHE003

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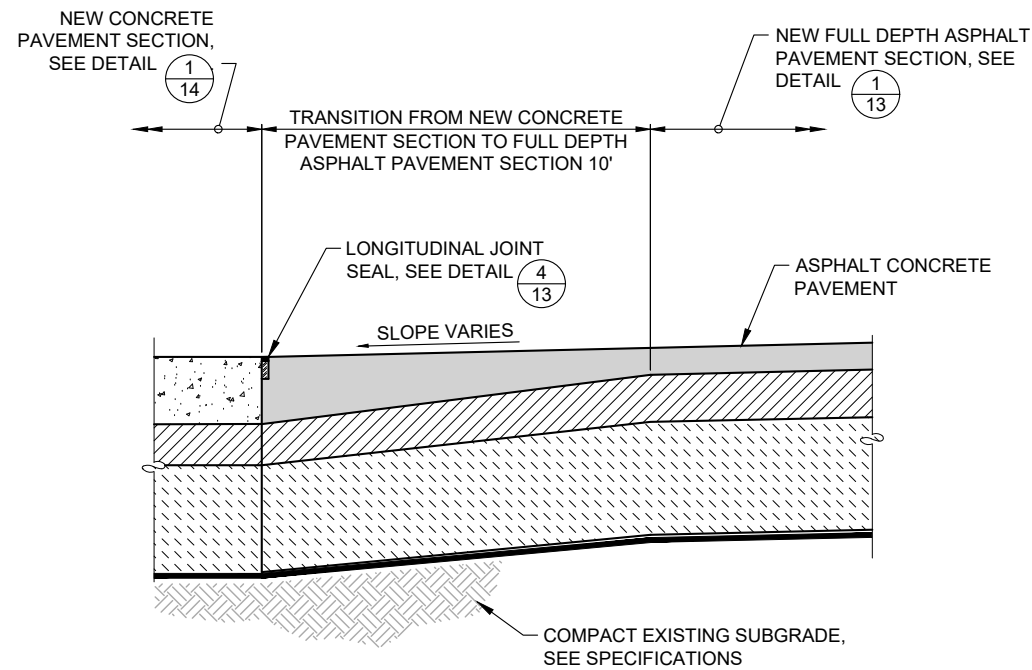
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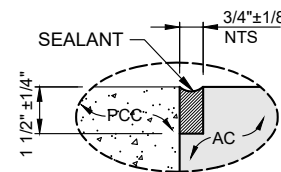
NEW ASPHALT PAVEMENT SECTION
NTS (1/13)



FULL DEPTH PAVEMENT SECTION TO EXISTING HMA PAVEMENT CONNECTION DETAIL
NTS (2/13)

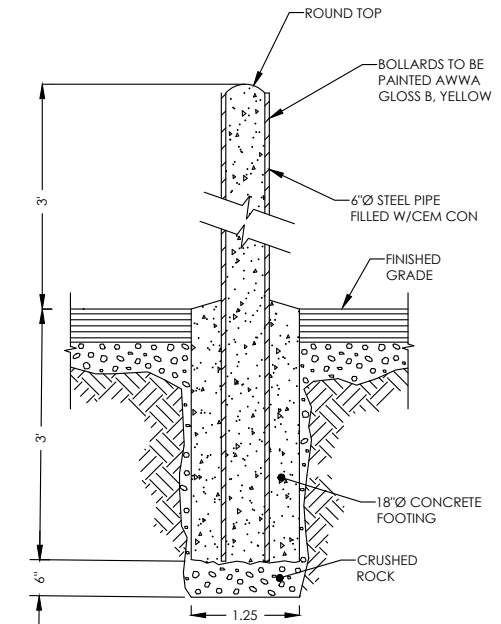


NEW CONCRETE PAVEMENT SECTION TO NEW ASPHALT PAVEMENT SECTION CONNECTION DETAIL
NTS (3/13)



NOTE:
CONTRACTOR TO SAWCUT NEW PAVEMENT TO PROVIDE RESERVOIR FOR SEALANT. CLEAN AND DRY ALL SURFACES PRIOR TO FILLING, TYPICAL. SEE SPECIFICATIONS. JOINT SEALING SHALL BE PAID UNDER THE LONGITUDINAL JOINT SEAL BID ITEM.

LONGITUDINAL JOINT SEAL DETAIL
NTS (4/13)



TYPICAL BOLLARD SECTION DETAIL
NTS (5/13)

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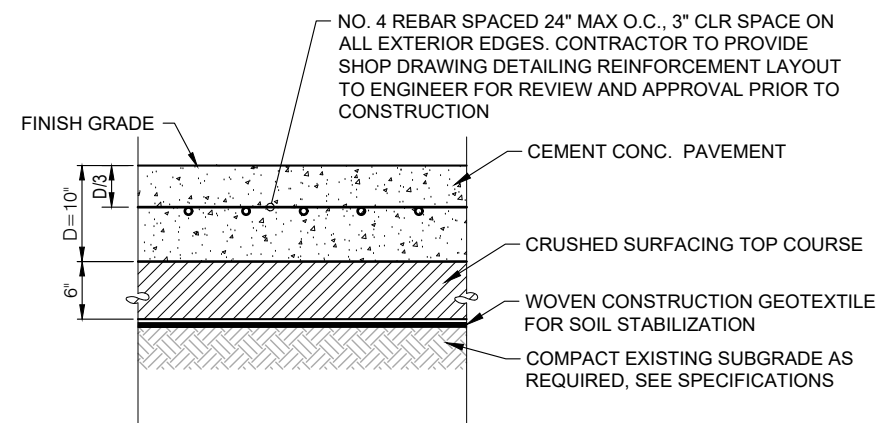


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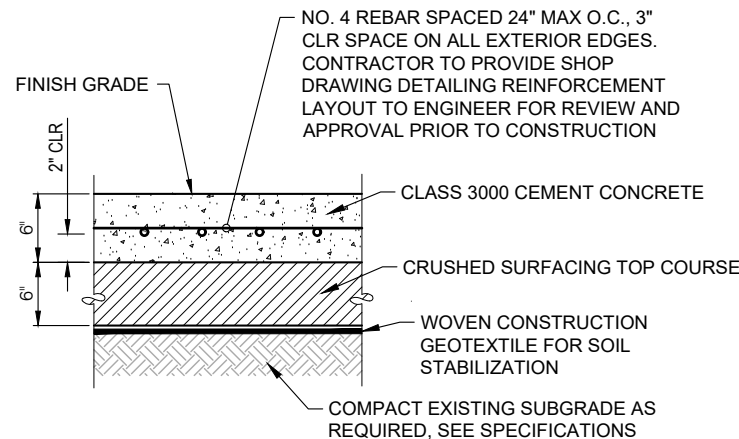
CHEHALIS - CENTRALIA AIRPORT FUELING APRON SITE IMPROVEMENTS
PAVEMENT DETAILS
PRECISION APPROACH ENGINEERING, INC.

PROJECT NUMBER: **CHE003**
SHEET NO. **13**
OF **23**



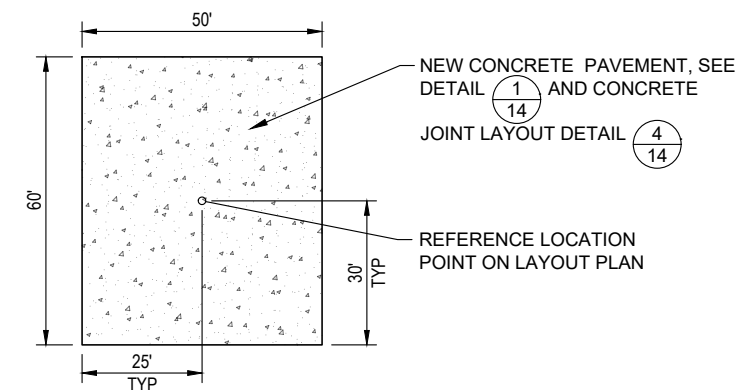
NEW CONCRETE PAVEMENT SECTION
NTS

1
14



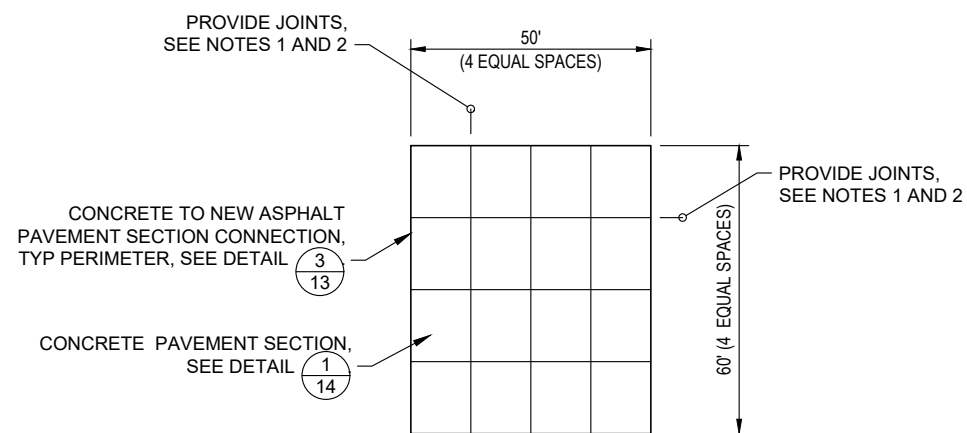
CEMENT CONCRETE FUELING EQUIPMENT PAD
NTS

2
14



CONCRETE PAD
NTS

3
14

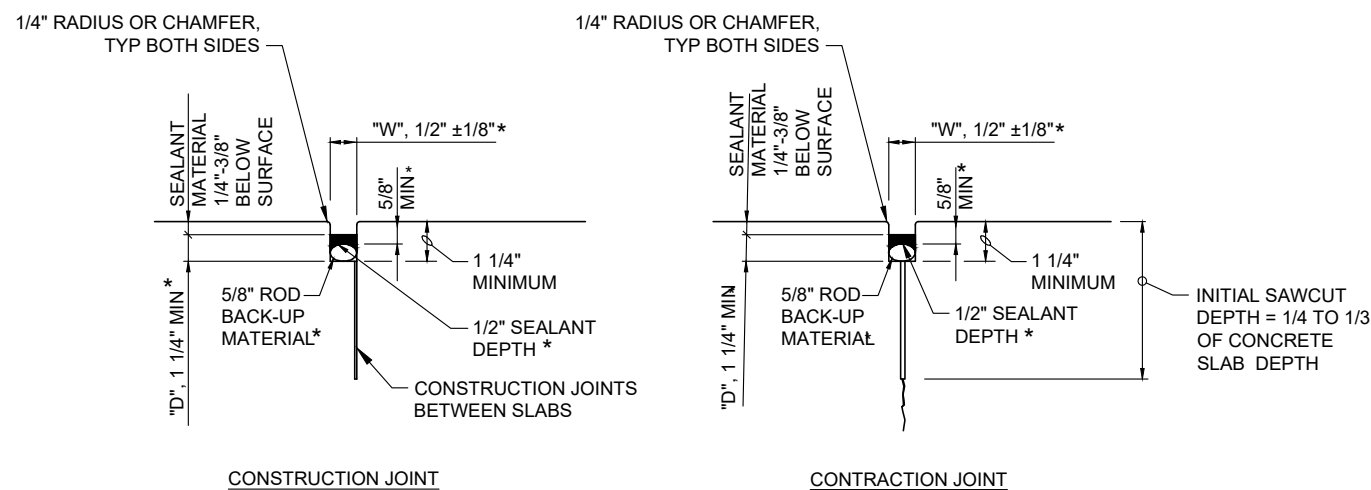


CONCRETE JOINT LAYOUT DETAIL
NTS

4
14

CONCRETE JOINT NOTES:

1. THE CONTRACTOR SHALL SUBMIT, TO THE ENGINEER, SHOP DRAWINGS DEPICTING PROPOSED JOINT TYPES AND SPACING PRIOR TO STARTING CONSTRUCTION.
2. SEE DETAIL 5 FOR JOINT SEALANT INSTALLATION DETAIL.



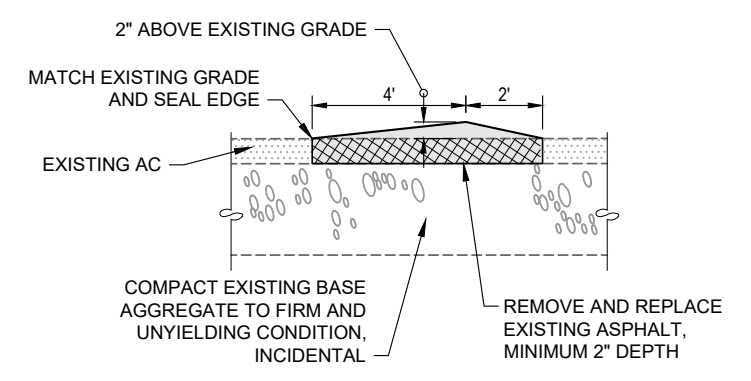
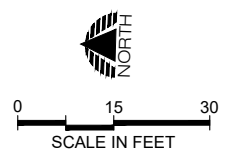
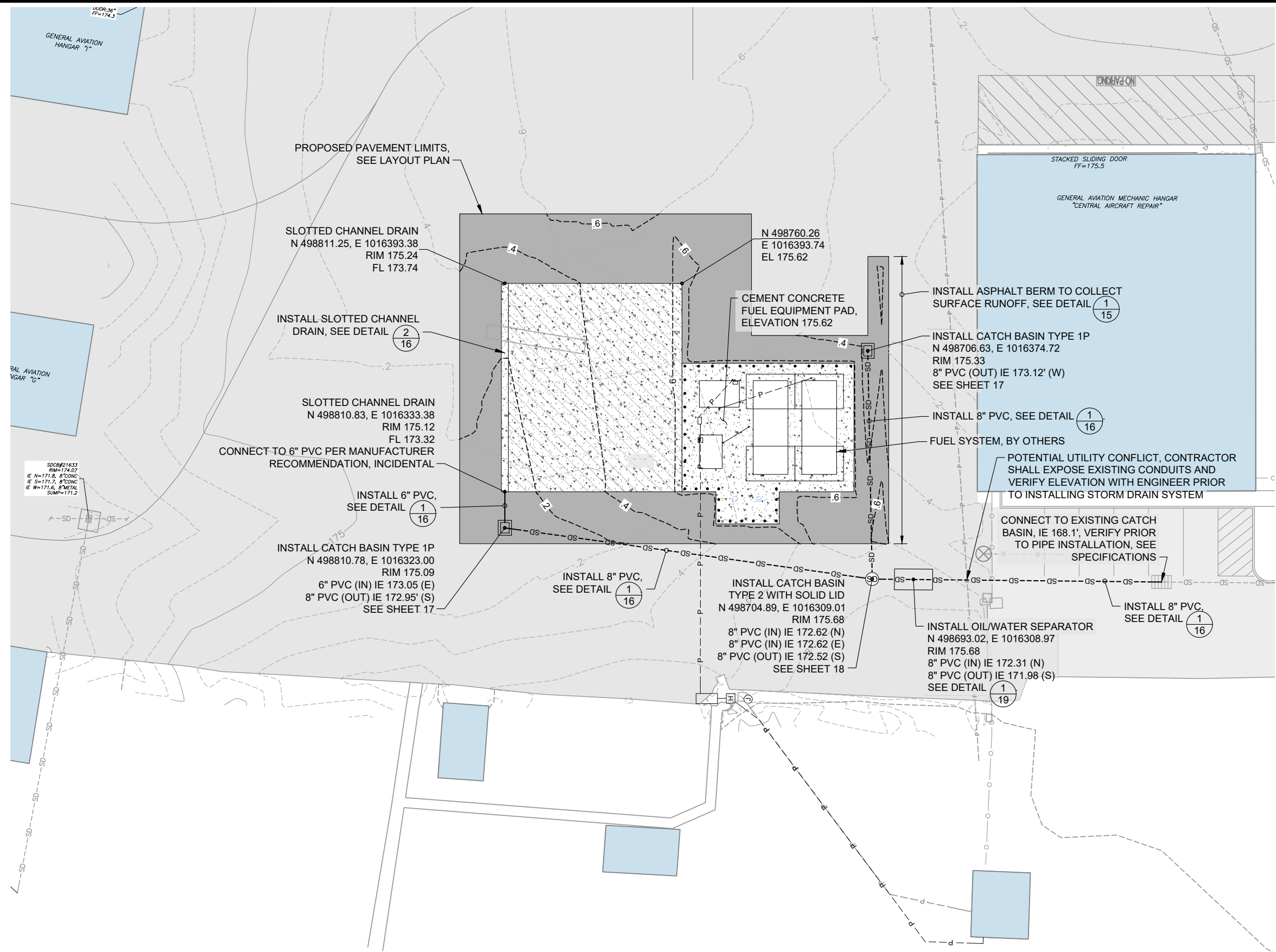
NOTES:

1. CONTRACTOR TO SAWCUT NEW CONCRETE TO PROVIDE RESERVOIR FOR SEALANT MEETING ASTM D-5893. CLEAN AND DRY ALL SURFACES PRIOR TO FILLING, TYP. SEE SPECIFICATIONS.
2. SEALANT RESERVOIR SHALL BE TO PROVIDE PROPER SHAPE FACTOR. "W" AND "D" DIMENSIONS MAY VARY PER MANUFACTURERS RECOMMENDATIONS TO PROVIDE OPTIMUM PERFORMANCE. ENGINEERS REVIEW AND APPROVAL OF SEALANT RESERVOIR REQUIRED PRIOR TO CONSTRUCTION.
3. ROD BACK-UP MATERIAL MUST BE COMPATIBLE WITH THE TYPE OF LIQUID SEALANT USED AND SIZED TO PROVIDE THE DESIRED SHAPE FACTOR.

CONCRETE JOINT SEALANT INSTALLATION DETAIL
NTS

5
14

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ASPHALT BERM DETAIL
NTS

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CHEHALIS - CENTRALIA AIRPORT
FUELING APRON SITE IMPROVEMENTS

GRADING AND DRAINAGE PLAN

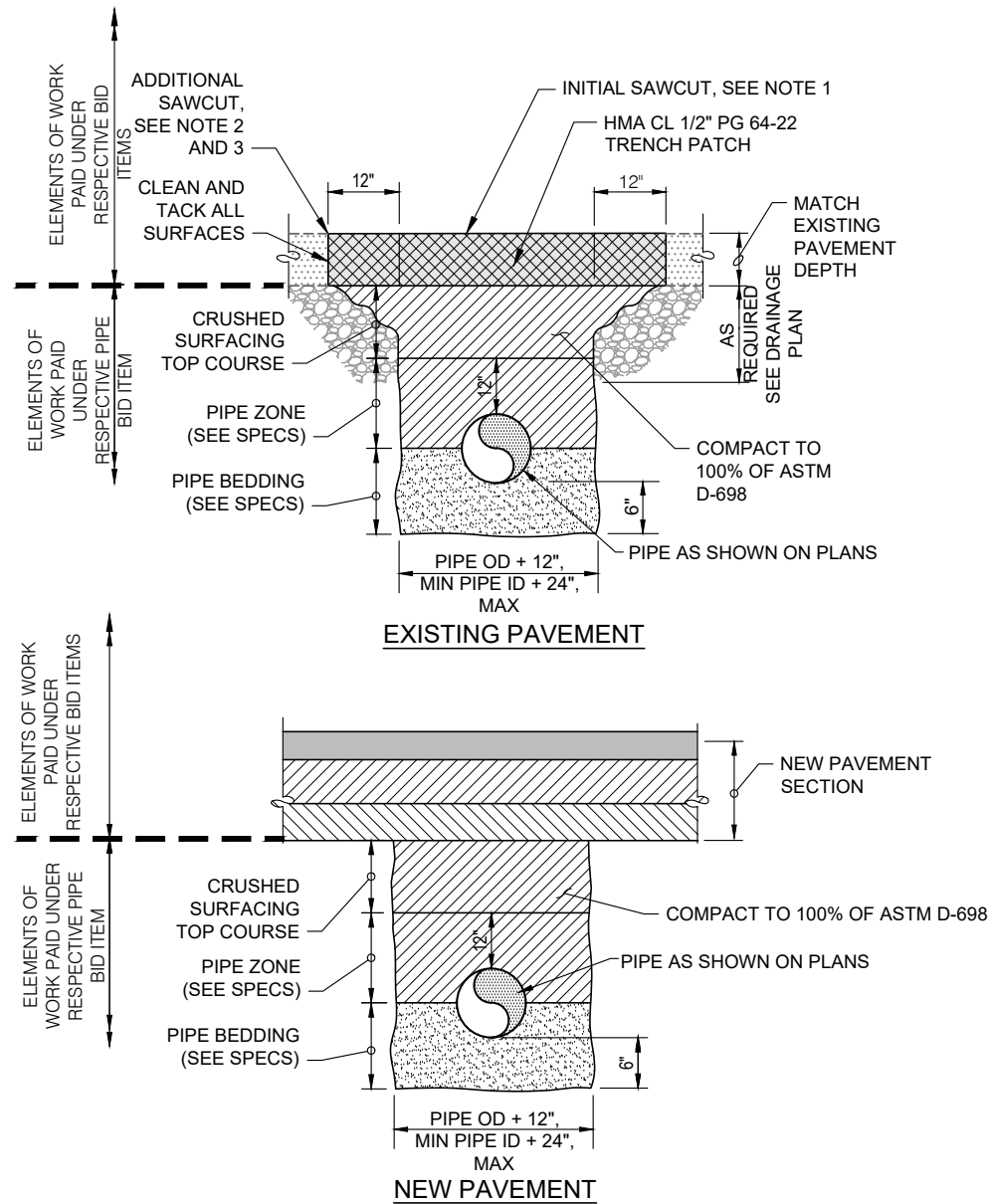
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PROJECT NUMBER:
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15

OF **23**

05/11/21 - 5:14pm - JWade - P:\C\che003-fuel sys\0400CAD\DWG\Sheets\CHE003-SDDE.dwg



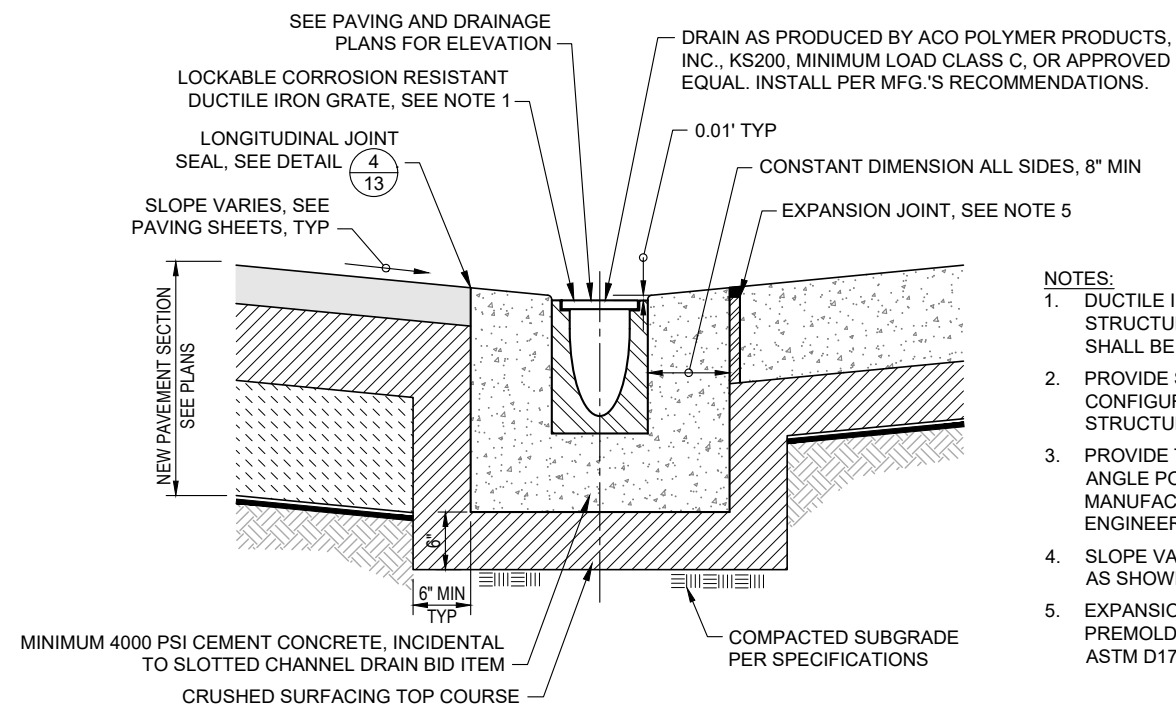
NOTES:

1. INITIAL SAWCUT TO PROVIDE AREA OF PAVEMENT REMOVAL FOR TRENCHING AND BACKFILL.
2. ADDITIONAL SAWCUT INTENDED TO COMPENSATE FOR PAVEMENT UNDERMINING, VERIFY WITH ENGINEER PRIOR TO SAW CUTTING.
3. BACKFILL TO WITHIN 10" OF EXISTING SURFACE PRIOR TO MAKING ADDITIONAL SAWCUT.

STORM STRAIN PIPE DETAIL

NTS

1
16



SLOTTED CHANNEL DRAIN DETAIL

NTS

2
16

NOTES:

1. DUCTILE IRON GRATE SHALL MEET OR EXCEED STRUCTURE LOAD RATING. MAXIMUM PERFORATION SHALL BE "HEEL RESISTANT", NOT TO EXCEED 0.31".
2. PROVIDE SHOP DRAWINGS FOR CHANNEL DRAIN CONFIGURATION, TYPE, SIZE, SLOPE, AND OUTLET STRUCTURES FOR APPROVAL BY THE ENGINEER.
3. PROVIDE TRANSVERSE EXPANSION JOINT AT EVERY ANGLE POINT AND/OR AS DIRECTED BY MANUFACTURER RECOMMENDATION OR THE ENGINEER, TYP
4. SLOPE VARIES, MATCH SLOPE DIRECTION AND GRADE AS SHOWN ON GRADING PLAN.
5. EXPANSION JOINT SHALL INCLUDE A NON-EXTRUDING PREMOLDED COMPRESSIBLE MATERIAL MEETING ASTM D1751 OR D1752.

PRECISION APPROACH ENGINEERING
 119 Grand Ave, Suite B
 Bellingham, WA 98225
 360•733•1567



05/11/2021

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DATE: MAY 2021
 DESIGN: DRR
 DRAWN: JAW
 CHECKED: GWV
 REVISION NUMBER: 0

SCALE: AS SHOWN

CHEHALIS - CENTRALIA AIRPORT FUELING APRON SITE IMPROVEMENTS

DRAINAGE DETAILS

PRECISION APPROACH ENGINEERING, INC.

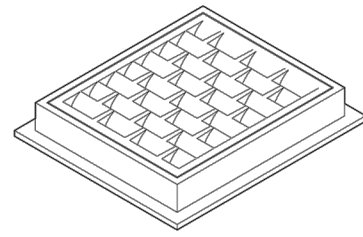
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SHEET NO.

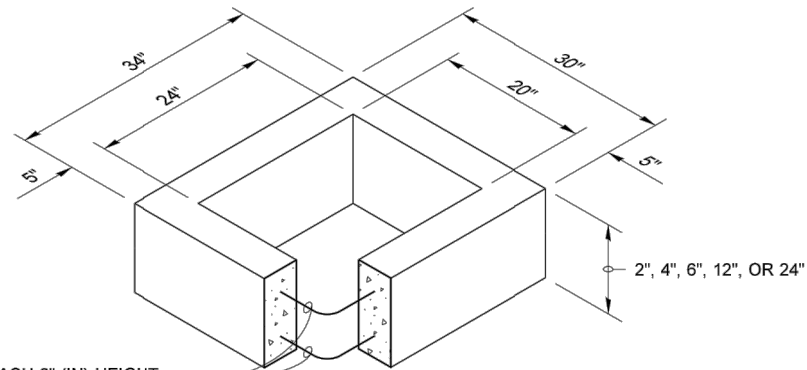
16

OF **23**

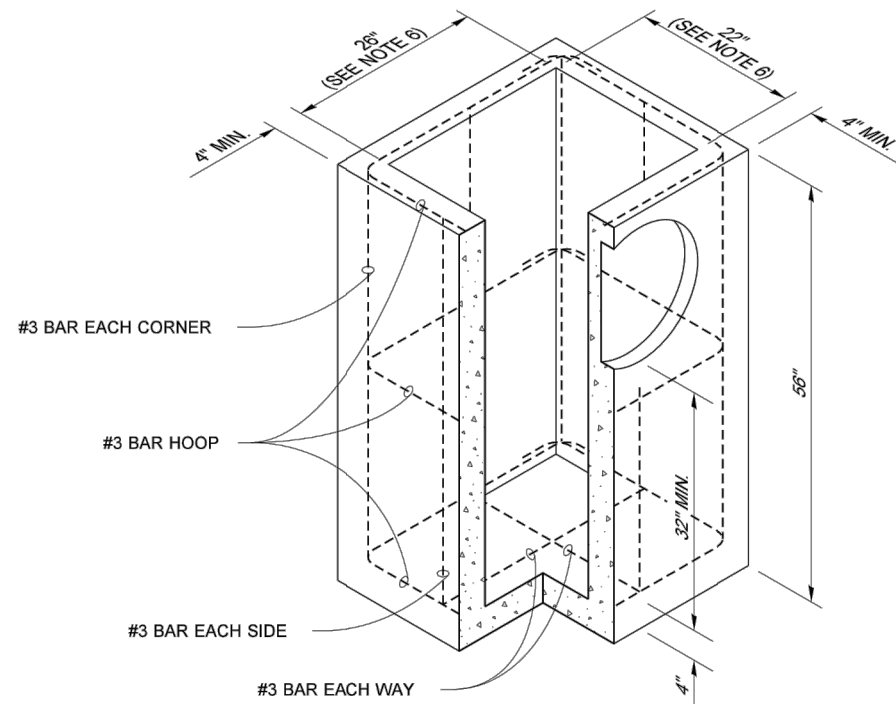
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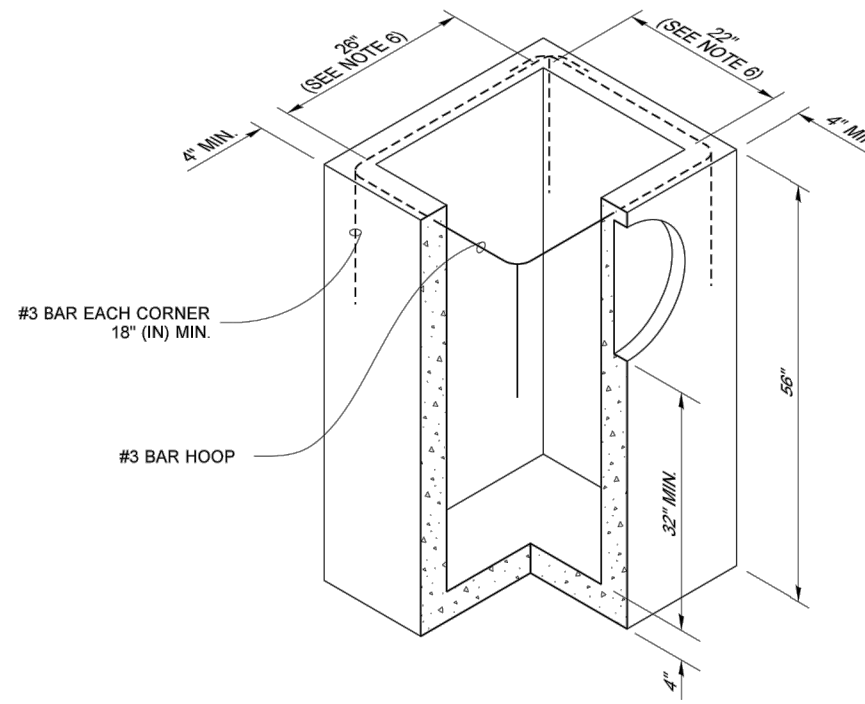
FRAME AND VANED GRATE



RECTANGULAR ADJUSTMENT SECTION



PRECAST BASE SECTION



ALTERNATIVE PRECAST BASE SECTION

NOTES

1. As acceptable alternatives to the rebar shown in the **PRECAST BASE SECTION**, fibers (placed according to the Standard Specifications), or wire mesh having a minimum area of 0.12 square inches per foot, shall be used with the minimum required rebar shown in the **ALTERNATIVE PRECAST BASE SECTION**. Wire mesh shall not be placed in the knockouts.
2. The knockout diameter shall not be greater than 18" (in). Knockouts shall have a wall thickness of 2" (in) minimum to 2.5" (in) maximum. Provide a 1.5" (in) minimum gap between the knockout wall and the outside of the pipe. After the pipe is installed, fill the gap with joint mortar in accordance with **Standard Specification Section 9-04.3**.
3. The maximum depth from the finished grade to the lowest pipe invert shall be 5' (ft).
4. The frame and grate may be installed with the flange down, or integrally cast into the adjustment section with flange up.
5. The Precast Base Section may have a rounded floor, and the walls may be sloped at a rate of 1 : 24 or steeper.
6. The opening shall be measured at the top of the Precast Base Section.
7. All pickup holes shall be grouted full after the basin has been placed.



Heilman, Julie
Jan 25 2017 2:56 PM

**CATCH BASIN TYPE 1P
(FOR PARKING LOT)**
STANDARD PLAN B-5.60-02

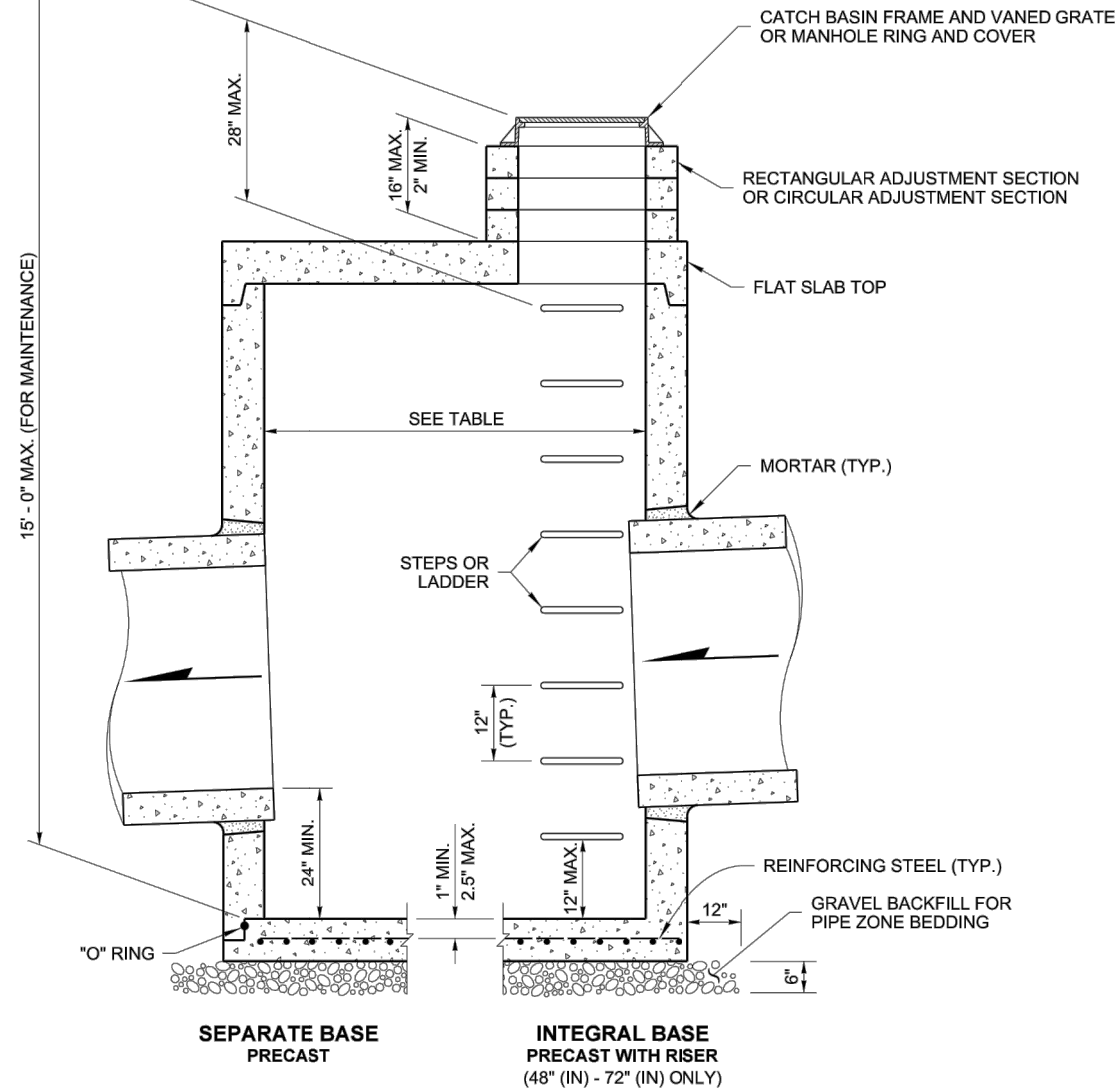
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Carpenter, Jeff
Jan 26 2017 6:49 AM

STATE DESIGN ENGINEER
Washington State Department of Transportation

05/11/21 - 5:14pm - J Wade - P:\ciche003-fuel sys\0400CAD\DWG\Sheets\CHE003-SDDE.dwg

DRAWN BY: FERN LIDDELL



NOTES

1. No steps are required when height is 4' or less.
2. The bottom of the precast catch basin may be sloped to facilitate cleaning.
3. The rectangular frame and grate may be installed with the flange up or down. The frame may be cast into the adjustment section.
4. Knockouts shall have a wall thickness of 2" (in) minimum to 2.5" (in) maximum. Provide a 1.5" (in) minimum gap between the knockout wall and the outside of the pipe. After the pipe is installed, fill the gap with joint mortar in accordance with **Standard Specification Section 9-04.3**.

CATCH BASIN DIMENSIONS

CATCH BASIN DIAMETER	MIN. WALL THICKNESS	MIN. BASE THICKNESS	MAXIMUM KNOCKOUT SIZE	MINIMUM DISTANCE BETWEEN KNOCKOUTS
48"	4"	6"	36"	8"
54"	4.5"	8"	42"	8"
60"	5"	8"	48"	8"
72"	6"	8"	60"	12"
84"	8"	12"	72"	12"
96"	8"	12"	84"	12"
120"	10"	12"	96"	12"
144"	12"	12"	108"	12"

PIPE ALLOWANCES

CATCH BASIN DIAMETER	PIPE MATERIAL WITH MAXIMUM INSIDE DIAMETER				
	CONCRETE	ALL METAL	CPSSP PP ①	SOLID WALL PVC ②	PROFILE WALL PVC ③
48"	24"	30"	24"	30"	30"
54"	30"	36"	30"	36"	36"
60"	36"	42"	36"	42"	42"
72"	42"	54"	42"	48"	48"
84"	54"	60"	54"	48"	48"
96"	60"	72"	60"	48"	48"
120"	66"	84"	60"	48"	48"
144"	78"	96"	60"	48"	48"

- ① Corrugated Polyethylene Storm Sewer Pipe (See **Standard Specification Section 9-05.20**)
- ② (See **Standard Specification Section 9-05.12(1)**)
- ③ (See **Standard Specification Section 9-05.12(2)**)
- ④ Polypropylene Pipe (See **Standard Specification Section 9-05.24**)



Heilman, Julie
Feb 20 2018 12:49 PM
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CATCH BASIN TYPE 2

STANDARD PLAN B-10.20-02

SHEET 1 OF 1 SHEET

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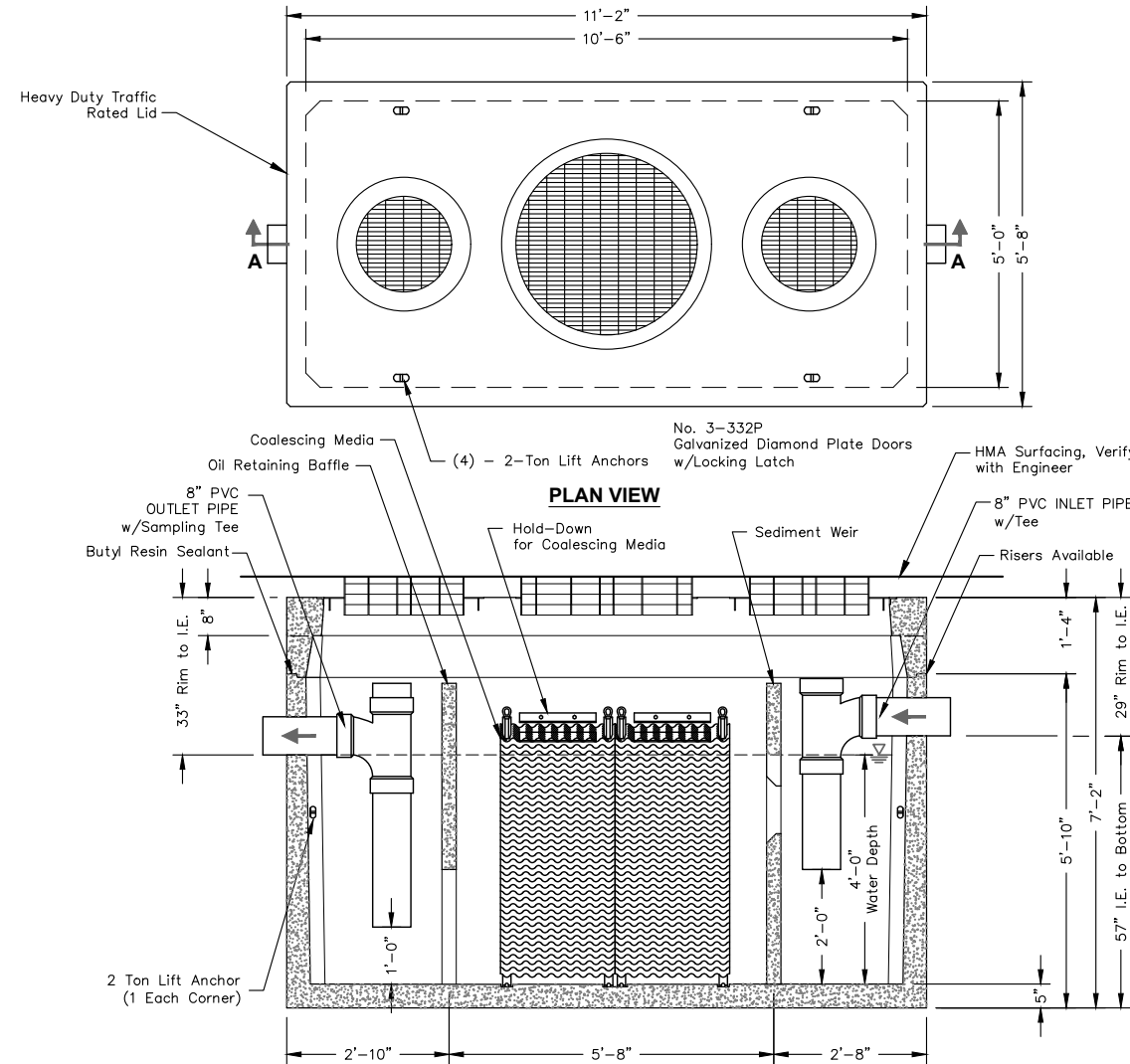
Carpenter, Jeff
Mar 2 2018 10:01 AM

STATE DESIGN ENGINEER
Washington State Department of Transportation

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Projected Coalescing Plate Area = 1,184 Sq.Ft.
 *Design Flow Rate = 280 GPM
 Maximum Process Flow = 754 GPM



SECTION AA

*DESIGN FLOW RATE	EFFLUENT QUALITY	100% COLLECTED SIZE
280 GPM	10 ppm	60 Micron

Basic Design Information: *
 Influent Characteristics
 - Oil Specific Gravity = 0.88
 - Operating Temperature = 50°
 - Influent Oil Concentration = 100 ppm
 - Mean Oil Droplet Size = 130 Microns
 - .033 ft/min. Critical Oil Droplet Predicted Rise Rate

*Basic Design Information per Washington State Department of Ecology; User to Adjust Estimates for Variations in Real Conditions.

- Notes:**
- Static Water Depth = 4'-0"
 - Prior to "Startup" of system, fill with clean water to bottom of outlet pipe. For best results, fill to flow line.
 - Follow Regular Inspection, Cleaning, & Maintenance Schedule (See Clean Out & Maintenance).

OIL WATER SEPARATOR

NTS

1
19

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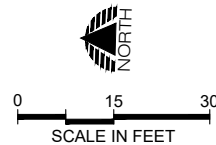


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DATE: MAY 2021
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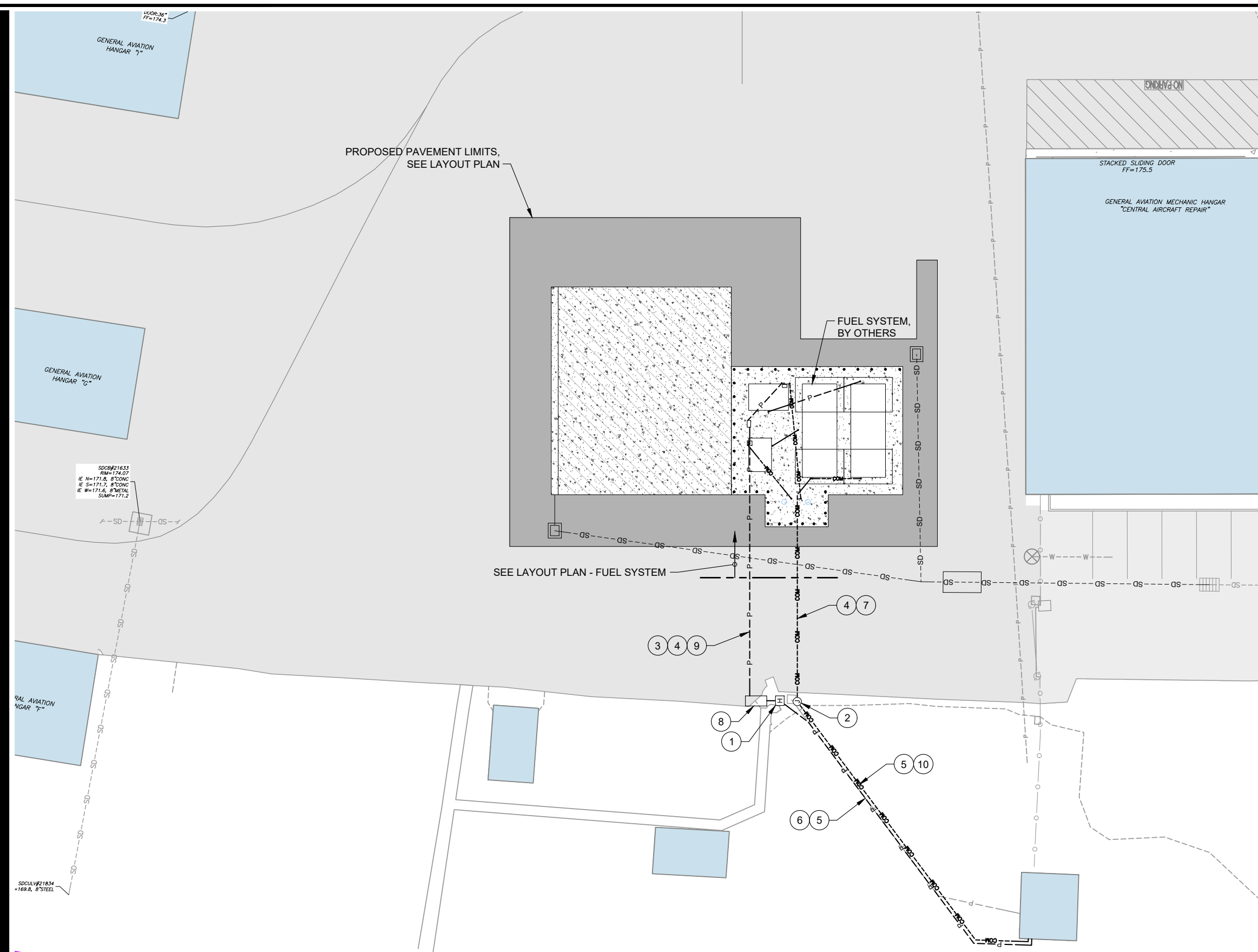
CHEHALIS - CENTRALIA AIRPORT
 FUELING APRON SITE IMPROVEMENTS
DRAINAGE DETAILS
 PRECISION APPROACH ENGINEERING, INC.

PROJECT NUMBER:
CHE003
 SHEET NO.
19
 OF **23**



LEGEND

- 1 INSTALL HANDHOLE, SEE DETAIL $\frac{1}{22}$
- 2 INSTALL JUNCTION CAN, SEE DETAIL $\frac{2}{22}$
- 3 INSTALL (2) 1" CONDUITS AND (2) 3/4" CONDUITS FROM LOAD CENTER TO FUELING EQUIPMENT. USE PVC (BELOW GRADE) AND IMC/RMC WITH SEALS ABOVE GRADE.
- 4 CONCRETE ENCASED DUCT, SEE DETAIL $\frac{1}{21}$
- 5 INSTALL (1) 2" CONDUIT, SEE DETAIL $\frac{2}{21}$
- 6 INSTALL (4) #3 XHHW-2 CABLES AND (1) #8 XHHW-2 EQUIPMENT GROUND CONDUCTOR
- 7 INSTALL (1) 3/4" CONDUIT, PVC BELOW GRADE, IMC/RMC ABOVE GRADE WITH SEALS, AND COMMUNICATION CABLE(S) AS REQUIRED BY ATG MANUFACTURER.
- 8 INSTALL NEMA 3R FUELING ELECTRICAL LOAD CENTER. SEE SHT 21. MOUNT LOAD CENTER ON STEEL SUPPORTS SET IN CONCRETE. PROVIDE EMERGENCY FUEL SHUTOFF SYSTEM.
- 9 INSTALL TWO 50AMP 3-PHASE CIRCUITS AND THREE 20AMP 120V 1-PHASE CIRCUITS FROM LOAD CENTER TO FUELING EQUIPMENT, SEE FUELING SYSTEM LAYOUT.
- 10 INSTALL (2) BELDEN 87760 CABLES AND (4) 18 AWG CONDUCTORS, (INTRINSICALLY SAFE CIRCUIT-TANK MONITOR).



05/11/21 - 5:14pm - JWade - P:\C\che003-fuel sys\0400CAD\DWG\Sheets\CHE003-Electrical.dwg

SDCM#21633
RUM=174.07
E N=171.6, 8" CONC
E S=171.7, 8" CONC
E W=171.6, 8" METAL
SUMP=171.2

SDCL#W21834
=169.8, 8" STEEL

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05/11/2021

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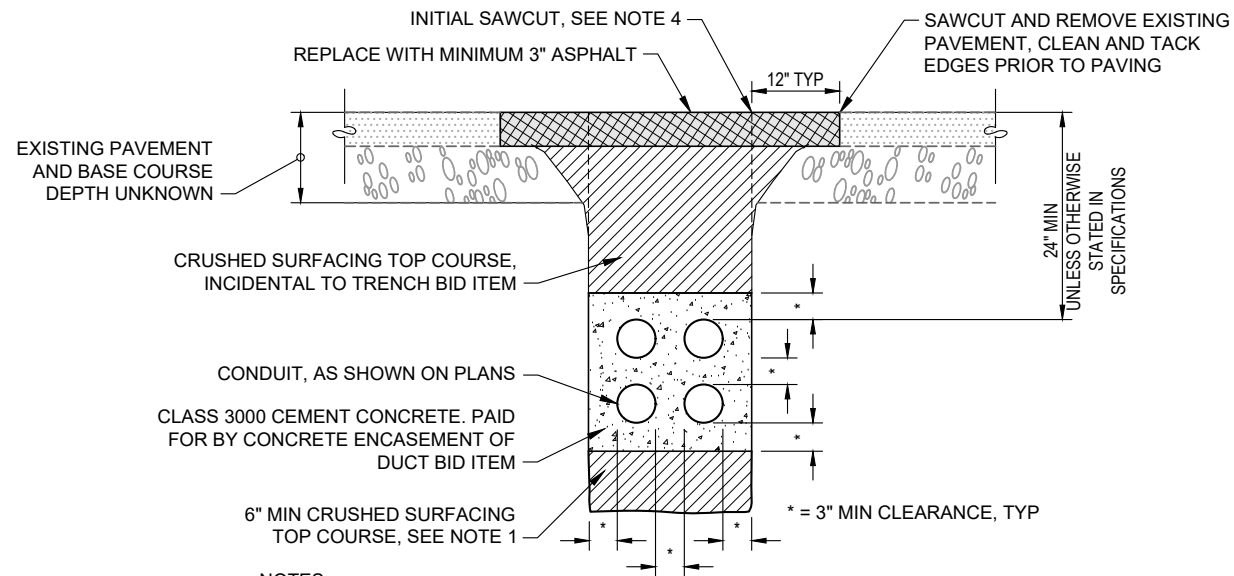
CHEHALIS - CENTRALIA AIRPORT
FUELING APRON SITE IMPROVEMENTS

ELECTRICAL PLAN

PRECISION APPROACH ENGINEERING, INC.

PROJECT NUMBER:
CHE003

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20
OF **23**

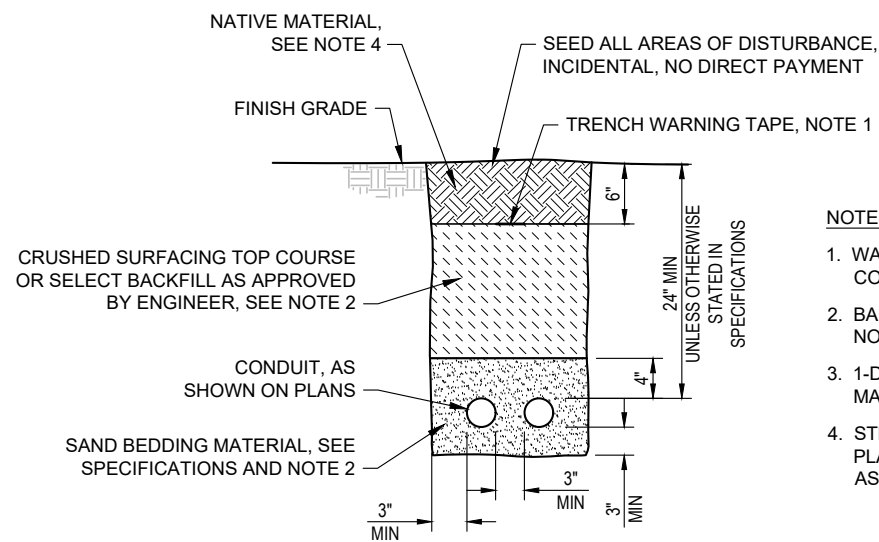


- NOTES:**
- TRENCHING AND BACKFILL CONSIDERED INCIDENTAL TO ELECTRICAL TRENCH, PAVED AREA BID ITEM.
 - DUCTS PLACED PRIOR TO CONSTRUCTING NEW PAVEMENT SECTION.
 - CONCRETE ENCASEMENT SHALL NOT BE INSTALLED WITHIN LIMITS OF CEMENT CONCRETE FUELING EQUIPMENT PAD.
 - INITIAL SAWCUT AND PAVEMENT REMOVAL FOR TRENCHING AND BACKFILL, ADDITIONAL SAWCUT INTENDED TO COMPENSATE FOR PAVEMENT UNDERMINING, VERIFY WITH ENGINEER. BACKFILL TO WITHIN 10" OF EXISTING SURFACE PRIOR TO MAKING ADDITIONAL SAWCUT.

STRUCTURAL PAVED AREA TRENCH DETAIL

NTS

1
21



NOTES:

- WARNING TAPE NOT REQUIRED FOR DUCT(S) ENCASED IN CONCRETE.
- BACKFILL CONSIDERED INCIDENTAL TO ELECTRICAL TRENCH, NON-PAVED AREA BID ITEM.
- 1-DUCT INSTALLATION SIMILAR. MORE THAN TWO DUCTS MAINTAIN HORIZONTAL AND VERTICAL SPACING.
- STRIP AND STOCKPILE NATIVE TOP SOIL PRIOR TO TRENCHING, PLACE AND COMPACT TO A DENSE AND UNYIELDING CONDITION AS APPROVED BY THE ENGINEER PRIOR TO SEEDING.

NON-PAVED AREA ELECTRICAL TRENCH DETAIL

NTS

2
21

CHEHALIS AIRPORT EEB ELECTRIC PANEL
120/240V, 1PH, 3W, 225A

CT NO	LOAD	CB	LOAD	L1	L2	LOAD	CB	LOAD	CT NO
1	CAMERA	20	1	6		5	20	RECEPTACLES	2
3	EXHAUST FAN	20	5		10	5	20	RECEPTACLES	4
5	SPARE	20		10		10	20	SPACE HEATER	6
7	LIGHTS	20	5		5		20	SPARE	8
9	SPARE	20		0				SPACE	10
11	CONTROL POWER	20	1		1			SPACE	12
13	CONTROL POWER	20	1	13		12	20	VASI NORTH	14
15	SPACE				12	12	20	"	16
17	SPARE	20		12		12	20	VASI SOUTH	18
19	BEACON	30	20		32	12	20	"	20
21	OBS LIGHTS	20	5	13		8	20	WIND SOCK	22
23	GENERATOR	50	0		60	60	100	MIRL REGULATOR	24
25	"	50	0	60		60	100	"	26
27	SPACE				0			SPACE	28
29	SPACE				0			SPACE	30
Total				114	120				

CHEHALIS AIRPORT FUELING ELECTRIC PANEL
240/120V, 3PH, 4W, 100A, MLO

CT NO	LOAD	CB	LOAD	L1	L2	L3	LOAD	CB	LOAD	CT NO
1	JET A FUEL PUMP	50	28	56			28	50	AVGAS FUEL PUMP	2
3	"	50	28		56		28	50	"	4
5	"	50	28			56	28	50	"	6
7	CARD READER	15	2	5						8
9	BLANK				0				BLANK	10
11	JET A CONTROL	15	10			13				12
13	AV GAS CONTROL	15	10	13						14
15	BLANK				0				BLANK	16
17	SPARE	15	0			2	2	15	GFCI RECEPT	18
Total				74	56	71				

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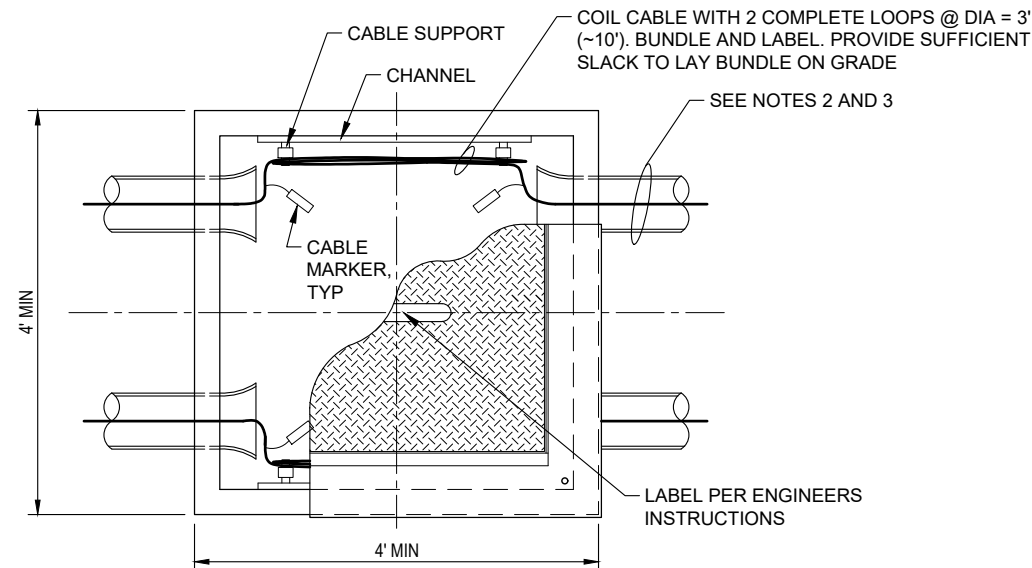


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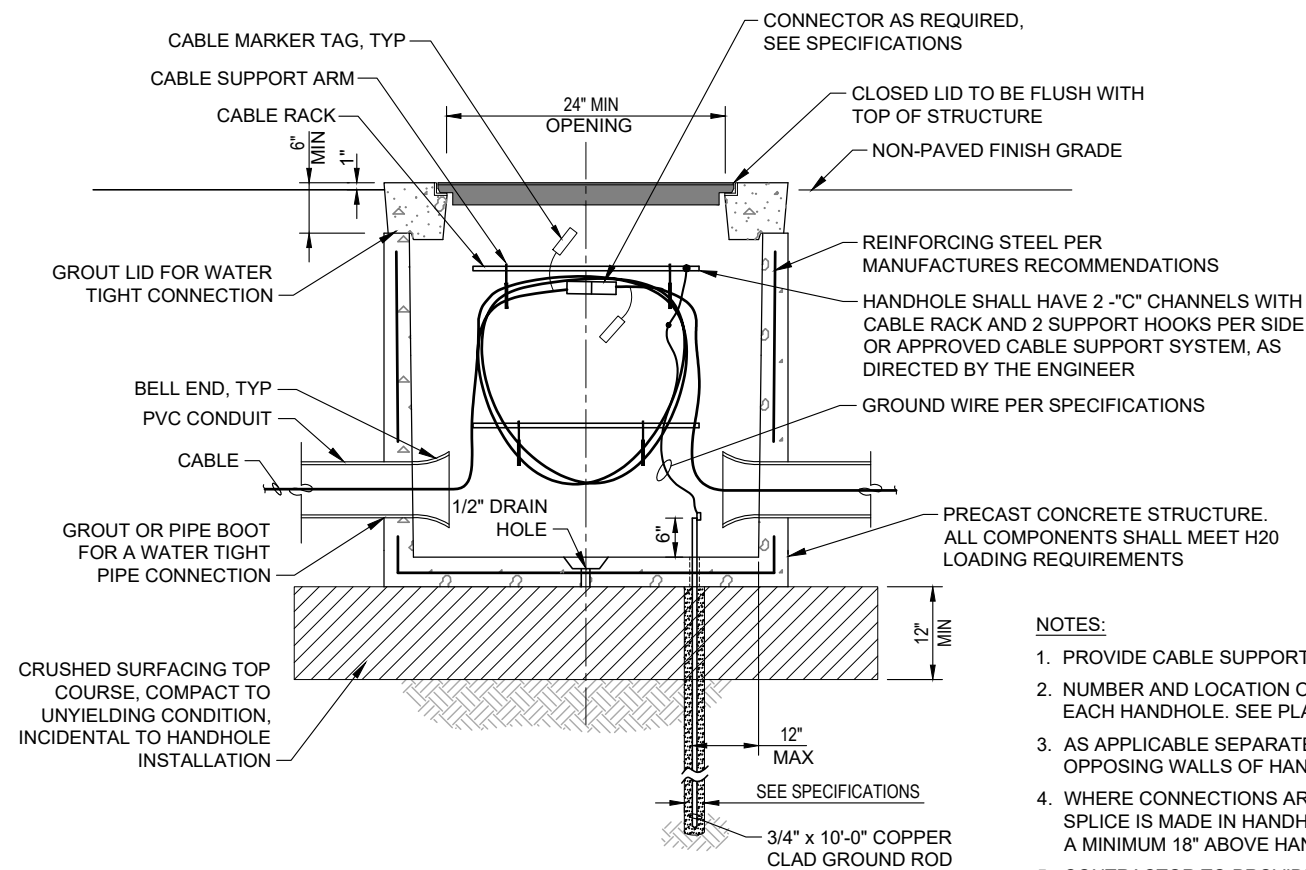
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 SCALE: AS SHOWN

CHEHALIS - CENTRALIA AIRPORT FUELING APRON SITE IMPROVEMENTS
ELECTRICAL DETAILS
 PRECISION APPROACH ENGINEERING, INC.

PROJECT NUMBER: **CHE003**
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 OF **23**



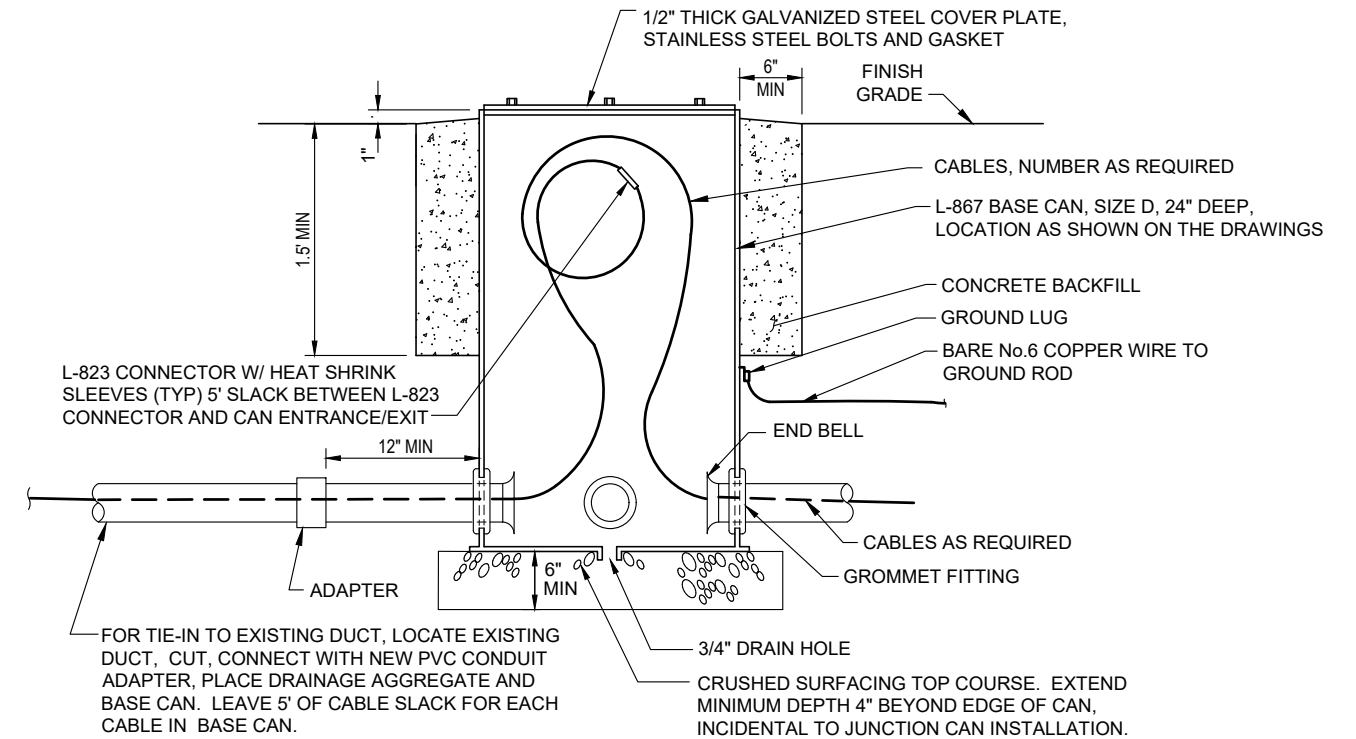
PLAN VIEW



PROFILE VIEW

HANDHOLE INSTALLATION DETAIL
NTS

1
22



JUNCTION CAN INSTALLATION DETAIL
NTS

2
22

NOTES:

1. PROVIDE CABLE SUPPORT LEVEL, MINIMUM, WITH SPLICE CENTERED.
2. NUMBER AND LOCATION OF CONDUITS AND CABLE WILL VARY FOR EACH HANDHOLE. SEE PLAN SHEET.
3. AS APPLICABLE SEPARATE HIGH AND LOW VOLTAGE CABLES TO OPPOSING WALLS OF HANDHOLE OR AS DIRECTED BY THE ENGINEER.
4. WHERE CONNECTIONS ARE MADE TO EXISTING CIRCUITS ENSURE SPLICE IS MADE IN HANDHOLE WITH ENOUGH SLACK TO PULL A SPLICE A MINIMUM 18" ABOVE HANDHOLE.
5. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR ENGINEERS APPROVAL PRIOR TO ORDERING STRUCTURES.
6. LID TO HINGE OPEN AWAY FROM APRON.
7. NEW HANDHOLE LOCATION AS DIRECTED BY ENGINEER. IF REQUIRED, EXTENSION OF EXISTING DUCT BANK CONDUITS TO NEW HANDHOLE PAID FOR BY RESPECTIVE SIZE CONDUIT BID ITEM.

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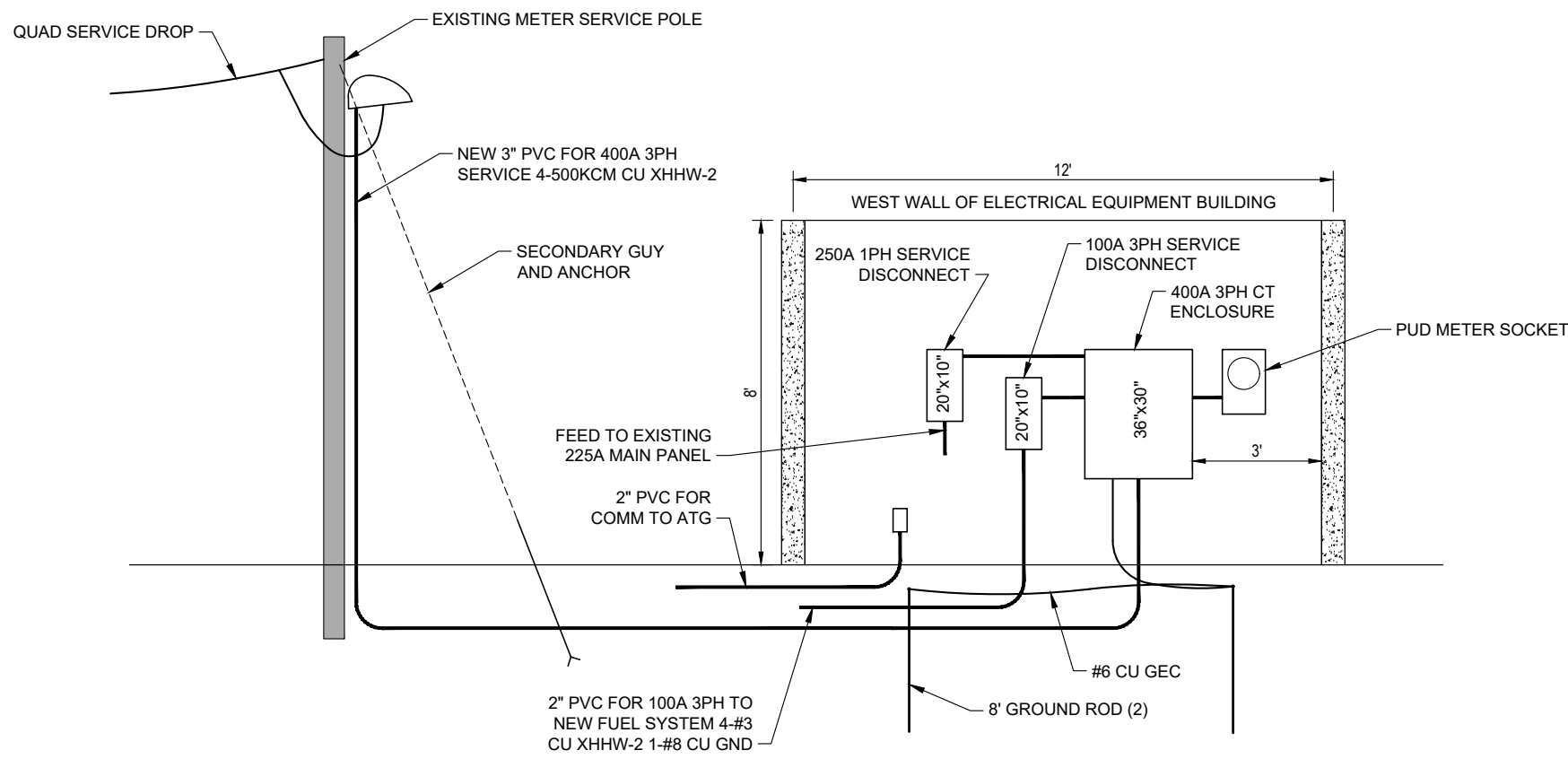
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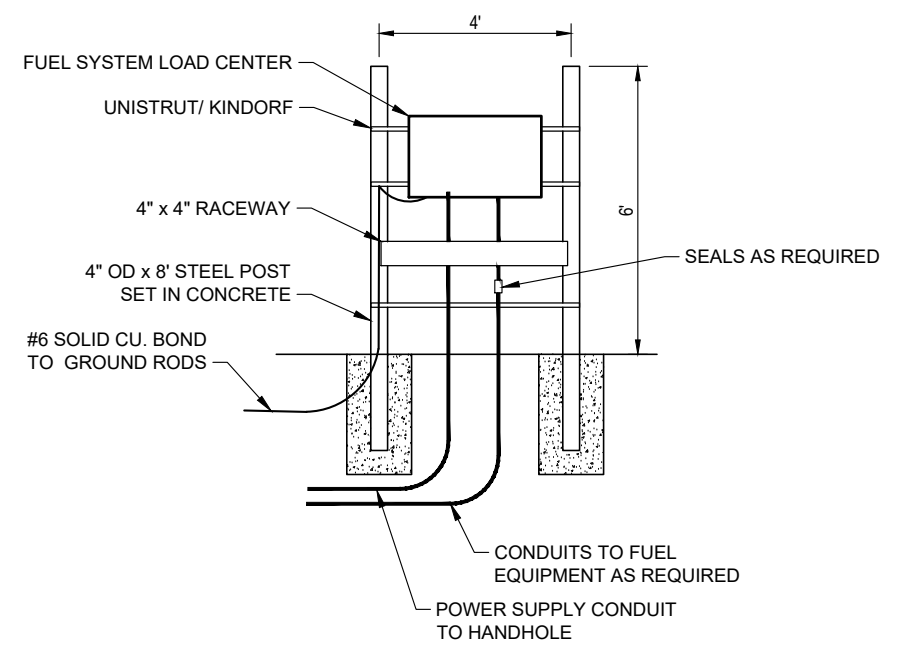
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ELECTRICAL DETAILS
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EEB SERVICE UPGRADE DETAIL 1
NTS 23



LOAD CENTER MOUNTING FRAME ELEVATION 2
NTS 23

PRECISION APPROACH
ENGINEERING
119 Grand Ave, Suite B
Bellingham, WA 98225
360•733•1567

PROFESSIONAL ENGINEER
GEOFF W. VAUGHN
STATE OF WASHINGTON
DIGITALLY SIGNED
33633
REGISTERED
PROFESSIONAL ENGINEER
05/11/2021

REVISIONS:	DATE	APPD.

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CHEHALIS - CENTRALIA AIRPORT
FUELING APRON SITE IMPROVEMENTS

ELECTRICAL DETAILS

PRECISION APPROACH ENGINEERING, INC.

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OF **23**

GENERAL STRUCTURAL NOTES:

- THESE NOTES ARE GENERAL IN NATURE AND ARE INTENDED TO SET MINIMUM STANDARDS FOR CONSTRUCTION. THE CONTRACTOR SHALL BE COMPLETELY FAMILIAR WITH THE CONTRACT DOCUMENTS AND HAVE A COPY OF THEM ON SITE AT ALL TIMES.
- FOR ANY PORTION OF THE CONSTRUCTION WHICH THE CONTRACTOR IS UNABLE TO ASCERTAIN THE REQUIRED CONSTRUCTION OR WHERE CONFLICTS EXIST, IT IS THE CONTRACTOR'S RESPONSIBILITY TO REQUEST ADDITIONAL INFORMATION (RFIs) AND/OR CLARIFICATIONS BEFORE CONSTRUCTION.
- ALL WORK SHALL BE IN STRICT CONFORMANCE WITH THE 2018 INTERNATIONAL BUILDING CODE (IBC) WITH WASHINGTON AMENDMENTS. ALL BUILDING ELEMENTS AND COMPONENTS NOT SPECIFICALLY DETAILED IN THESE STRUCTURAL CONSTRUCTION DOCUMENTS SHALL BE FABRICATED AND CONSTRUCTED IN ACCORDANCE WITH THE MINIMUM STANDARDS CONTAINED IN THE IBC AS AMENDED BY THE STATE OF WASHINGTON.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS BEFORE CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES.
- THE CONTRACTOR, SUBCONTRACTORS AND SUPPLIERS SHALL ENSURE COORDINATION OF CONTRACTOR SUPPLIED/DESIGNED ELEMENTS AND DEFERRED SUBMITTALS WITH ALL DESIGN DISCIPLINES WITHIN THE CONSTRUCTION SET. COORDINATION SHALL IDENTIFY AND RECONCILE CONFLICTS BETWEEN THE CONTRACTOR SUPPLIED/DESIGNED ELEMENTS AND THE CONSTRUCTION DRAWINGS PRIOR TO FABRICATION AND DELIVERY TO THE PROJECT SITE. THE PROJECT ENGINEER SHALL BE NOTIFIED IF CONFLICTS EXIST.
- THE CONTRACT STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE. METHODS, PROCEDURES, AND SEQUENCE OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND ENSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION.
- CONSTRUCTION LOADS SHALL NOT EXCEED THE DESIGN LIVE LOAD FOR THE STRUCTURE. PROVIDE SHORING AND/OR BRACING WHERE LOADS EXCEED DESIGN CAPACITY AND WHERE STRUCTURES HAVE NOT ATTAINED DESIGN STRENGTH.
- CLADDING, WATERPROOFING, AND ARCHITECTURAL FEATURES ARE OUTSIDE THE STRUCTURAL SCOPE OF WORK. ANY DEPICTION OF SUCH FEATURES ON THE STRUCTURAL DRAWINGS ARE NOT INTENDED TO BE USED FOR CONSTRUCTION. REPRESENTATION OF SUCH FEATURES ON THESE DRAWINGS MAY OR MAY NOT BE ACCURATE.

DESIGN LOADS: PER 2018 IBC W/ WASHINGTON AMENDMENTS

1603.1.1 - FLOOR LOADS:	
TANK DEAD LOAD	128,493 LBS - WEIGHT (FULL)
TANK CONTENTS SPECIFIC GRAVITY	0.8
1603.1.4 - WIND DESIGN CRITERIA:	
ULTIMATE DESIGN WIND SPEED, V_{ult}	107 MPH
RISK CATEGORY	IV
WIND EXPOSURE	EXPOSURE C
1603.1.5 - EARTHQUAKE DESIGN CRITERIA:	
RISK CATEGORY	IV
SEISMIC IMPORTANCE FACTOR, I_e	1.5
SPECTRAL ACCELERATION, S_a	1.19 g
SPECTRAL ACCELERATION, S_1	0.49 g
SITE CLASS	D (DEFAULT)
SPECTRAL RESPONSE COEFFICIENT, S_{DS}	0.952 g
SPECTRAL RESPONSE COEFFICIENT, S_{D1}	0.591 g

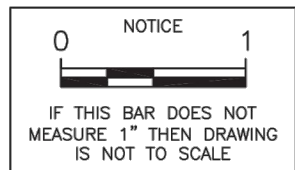
CONCRETE:

- ALL CONCRETE SHALL BE HARD ROCK CONCRETE MEETING REQUIREMENTS OF ACI-301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS". MIX PROPORTIONS SHALL BE PER ACI-301, METHOD 2 OR THE ALTERNATE PROCEDURE. SUBMIT MIX DESIGN FOR REVIEW BY STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.
- STRUCTURAL CONCRETE SHALL ATTAIN THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS:

TYPE	f'_c	SLUMP	w/c	AIR
FOOTINGS	5,000 psi*	1-4"	0.40	6%
- *SPECIAL INSPECTION NOT REQUIRED. 5,000 psi COMPRESSIVE STRENGTH IS SPECIFIED FOR WEATHERING PROTECTION. STRUCTURAL DESIGN OF CONCRETE BASED ON 2,500 psi COMPRESSIVE STRENGTH.
- ALL CONCRETE EXPOSED TO WEATHER SHALL CONTAIN 6% (\pm) 1% AIR ENTRAINMENT BY VOLUME. AIR ENTRAINMENT SHALL BE IN CONFORMANCE WITH ASTM C260 AND C494.
- COLD WEATHER PLACEMENT SHALL CONFORM TO ACI-306. HOT WEATHER PLACEMENT SHALL CONFORM TO ACI-305. MECHANICALLY VIBRATE ALL FORMED CONCRETE. DO NOT OVER-VIBRATE. PLACE CONCRETE MONOLITHICALLY BETWEEN CONSTRUCTION OR CONTROL JOINTS. PROTECT ALL CONCRETE FROM PREMATURE DRYING.
- CHAMFER ALL EXTERIOR CORNERS 1/2" UNLESS SHOWN OTHERWISE.
- SLUMP LIMITS MAY BE INCREASED BY ADDITION OF ADMIXTURES PROVIDED THAT THE WATER/CEMENT RATIO OF THE ORIGINAL MIX DESIGN IS NOT EXCEEDED. WATER REDUCING ADMIXTURE SHALL BE IN CONFORMANCE WITH ASTM494, USED IN CONFORMANCE WITH MANUFACTURER'S INSTRUCTIONS. SUBMIT ADMIXTURES TO ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION.
- CEMENT SHALL BE TYPE I OR II IN CONFORMANCE WITH ASTM C150. AGGREGATES SHALL BE IN CONFORMANCE WITH ASTM C33 AND USE CRUSHED (NOT ROUND) GRAVEL OR STONE. COARSE AGGREGATES SHALL NOT EXCEED 3/4". WATER SHALL BE CLEAN AND POTABLE.
- REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60. GRADE 40 MAY BE USED FOR #3 AND SMALLER TIES AND STIRRUPS. DETAIL AND PLACE ACCORDING TO ACI MANUAL SP-66.
- UNLESS OTHERWISE NOTED, MINIMUM COVER SHALL BE 1 1/2" FOR #5 AND SMALLER BARS, 2" FOR #6 AND LARGER BARS AND 3" WHEN POURED AGAINST EARTH. SUPPORT REINFORCEMENT WITH APPROVED CHAIRS, SPACERS, OR TIES.
- PROVIDE MINIMUM 48 BAR DIAMETERS AT SPLICES. NO MORE THAN 50% OF REINFORCING SHALL BE SPLICED AT ANY LOCATION. UNLESS OTHERWISE NOTED, BEND ALL HORIZONTAL REINFORCING A MINIMUM OF 2'-0" AT CORNERS AND WALL/FOOTING INTERSECTIONS WITH MIN. EMBEDMENT BEYOND INTERFACE PER DEVELOPMENT LENGTH SPECIFIED IN ACI 318.
- FORMWORK SHALL BE IN ACCORDANCE WITH ACI-347 "GUIDE TO FORMWORK FOR CONCRETE". FORMS SHALL BE DESIGNED BY THE CONTRACTOR. BRACING SHALL BE PROVIDED AS REQUIRED OR UNTIL THE CONCRETE HAS REACHED ITS SPECIFIED 28-DAY STRENGTH. ALL SHORING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. FORMWORK, SUPPORTS, AND SHORING SHALL PROVIDE FINISHED CONCRETE SURFACES AT ALL FACES: LEVEL, PLUMB, AND TRUE TO DIMENSIONS AND ELEVATIONS SHOWN IN THE DRAWINGS.

FOUNDATIONS:

- SOIL CHARACTERISTICS HAVE BEEN ASSUMED PER THE 2018 IBC W/ WASHINGTON AMENDMENTS, SECTION 1806 PRESUMPTIVE LOAD-BEARING VALUES OF SOILS CONSISTENT WITH CLAY, SANDY CLAY, SILTY CLAY, CLAYEY SILT, SILT AND SANDY SILT (CL, ML, MH AND CH) SOIL TYPES. THE CONTRACTOR SHALL VERIFY THE PRESUMED SOIL TYPES PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER AND ARCHITECT OF NON-CONFORMING IN-SITU CONDITIONS IF PRESENT BEFORE PROCEEDING.
- ALL FOUNDATIONS TO BEAR ON UNDISTURBED NATIVE MATERIAL, OR GRANULAR COMPACTED FILL.
- SOIL DESIGN CRITERIA, PER 2018 IBC SECTION 1806:
 - SOIL BEARING - 1,500 PSF
 - 1/2 INCREASE ALLOWED FOR SHORT TERM LOADS
 - LATERAL BEARING - 150 PSF
 - FRICTION COEFFICIENT: 0.3



PSE
 PETERSON STRUCTURAL ENGINEERS
 9409 SW Barnes Rd., Ste. 100
 Portland, OR 97225
 (503) 282-1635

CLIENT INFO:
 SCOTT MILSTED
 MASCOTT EQUIPMENT
 435 NE HANCOCK ST
 PORTLAND, OR 97212

PROJECT SITE:
 CHEHALIS AIRPORT
 900 NW AIRPORT RD
 CHEHALIS, WA 98532

SHEET CONTENT
 GENERAL NOTES
 AND TANK
 FOUNDATION PLAN
 AND SECTION

JOB No.
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DATE
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REVISIONS

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