					SHEE7	T NUM.	 P /	1 <i>RT</i> .	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SE SHE
16	17	18	20	21	67		01/S<2BR	02/s<2BR		EXT	TOTAL			N
													STRUCTURE OVER 20 FOOT SPAN (STA-62T-0137R)	j
													STRUCTURE OVER 20 FOOT SPAN (STA-62T-0138L)	, i
													STRUCTURE OVER 20 FOOT SPAN (STA-225-0059)	
													STRUCTURE OVER 20 FOOT SPAN (STA-225-0039)	
													MAINTENANCE OF TRAFFIC	
				2,880				2,880	202	23000	2,880	SY	PAVEMENT REMOVED	
	0.10			600				600	202	30701	600	FT	CONCRETE BARRIER REMOVED, AS PER PLAN	
	0.16 360							0.16 360	209 253	72050 01000	0.16 360	MILE SY	PREPARING SUBGRADE FOR SHOULDER PAVING PAVEMENT REPAIR	
3,110					3,750			6,860	254	01000	6,860	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1 1/4"	
2,950								2,950	254	01000	2,950	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1 3/4"	
				1,763				1,763	255	20000	1,763	FT	FULL DEPTH PAVEMENT SAWING	
570	32				700			32	407	13900	32	GAL	TACK COAT, 702.13	
530	100				320			850 100	407	20000 10000	850 100	GAL CY	NON-TRACKING TACK COAT TRAFFIC COMPACTED SURFACE, TYPE A	
	700							,,,,	770			, , , , , , , , , , , , , , , , , , ,	,	
110			149	60	1.700		149	60	411	10000	209	CY	STABILIZED CRUSHED AGGREGATE	
110 145					1,300			1,410 145	441	50101 50300	1,410 145	CY CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG64-22 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	
		400					300	100	614	11110	400	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
		975					200	775	614	11630	975	FT	INCREASED BARRIER DELINEATION	
			4	6			4	6	614	12380	10	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	
-	3				LS		2	LS 1	614 614	12420 12756	LS 3	EACH	DETOUR SIGNING WORK ZONE CROSSOVER LIGHTING SYSTEM	
			1,352	550			1,352	550	614	12801	1,902		WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	
26	50							76	614	13000	76	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
		60					50	10	614	13001	60	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC, AS PER PLAN	
		228					180	48	614	13310	228		BARRIER REFLECTOR, TYPE 1, ONE WAY	
		36					28	8	614	13312	36	EACH EACH	BARRIER REFLECTOR, TYPE 2, ONE WAY	
		92 21					79	13	614 614	13350 13360	92 21	EACH	OBJECT MARKER, ONE WAY OBJECT MARKER, TWO WAY	
		7.0						1.0		10001	7.0	011117		
3.12		70					28	42 0.52	614 614	18601 20011	70 3.12		PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN WORK ZONE LANE LINE, CLASS I, 6", AS PER PLAN	
0.29							2.0	0.29	614	21001	0.29		WORK ZONE CENTER LINE, CLASS I, AS PER PLAN	
5.98			8.61	2.06			13.81	2.84	614	22011	16.65		WORK ZONE EDGE LINE, CLASS I, 6", AS PER PLAN	
151			967	125			967	276	614	23011	1,243	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", AS PER PLAN	
			3,824				3,824		614	24001	3,824	FT	WORK ZONE DOTTED LINE, CLASS I, AS PER PLAN	
27 3				55 2				82	614	26001	82 5		WORK ZONE STOP LINE, CLASS I, AS PER PLAN WORK ZONE ARROW, CLASS I	
3			LS	LS			LS	5 LS	614 615	30000 10001	LS	EACH	ROADS FOR MAINTAINING TRAFFIC. AS PER PLAN	17,
			3,030	2,294			3,030	2,294	615	20000	5,324	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	,
	180						25	155	616	10000	180	MGAL	WATER	
	11,550						11,550	700	618	40101	11,550	FT	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE), AS PER PLAN	
20								20	621	00100	20	EACH	RPM	
20			3,020	380			3,020	20 380	621 622	54000 41100	20 3,400	EACH FT	RAISED PAVEMENT MARKER REMOVED PORTABLE BARRIER, UNANCHORED	
											·			
			2,740	300 655			2,740	300 655	622 622	41101 41111	3,040 655	FT FT	PORTABLE BARRIER, UNANCHORED, AS PER PLAN PORTABLE BARRIER, ANCHORED, AS PER PLAN	
				000	0.5			0.5	646	10000	0.5		EDGE LINE, 4"	
0.31								0.31	646	10010	0.31	MILE	EDGE LINE, 6"	
					0.25			0.25	646	10200	0.25	MILE	CENTER LINE	
													INCIDENTALS	
1							LS LS	LS LS	100 614	50200 11001	LS LS	-	DEPARTMENT'S SHARE OF THE DISPUTE RESOLUTION ADVISOR MAINTAINING TRAFFIC, AS PER PLAN	
							11	11	619	16010	22	MNTH	FIELD OFFICE, TYPE B	
						1		+				1		
							LS LS	LS LS	623 624	10000	LS LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING MOBILIZATION	

OPTION A:

- REMOVE EXISTING DECK CONCRETE DECK SLAB, PARAPETS AND APPROACH SLABS.
- REMOVE ABUTMENT BACKWALLS, PORTIONS OF WINGWALLS, PIER CAPS AND COLUMNS TO 1'-0" MINIMUM BELOW EXISTING GROUND.
- REMOVE CROSSFRAMES AND BEAMS.
- 4. INSTALL NEW CULVERT.
 5. COMPACT FILL IN BRIDGE FOOTPRINT TO PROPOSED GRADE.
 6. CONSTRUCT NEW ROADWAY.
- OPEN TO TRAFFIC.

OPTION B:

- INSTALL NEW CULVERT.
- COMPACT FILL UNDER BRIDGE TO WITHIN 10'-0" OF PROPOSED GRADE.
- REMOVE EXISTING DECK CONCRETE DECK SLAB, PARAPETS AND APPROACH SLABS.
 REMOVE ABUTMENT BACKWALLS, PORTIONS OF WINGWALLS, PIER CAPS AND COLUMNS
 TO 1'-0" MINIMUM BELOW PROPOSED GROUND.
 REMOVE CROSSFRAMES AND BEAMS.

- COMPACT FILL UNDER BRIDGE TO PROPOSED GRADE. CONSTRUCT NEW ROADWAY.
- 8. OPEN TO TRAFFIC.

EXISTING STRUCTURE VERIFICATION:

EXISTING STRUCTURE VERIFICATION: DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND *513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

EXISTING BRIDGE PLANS:

EXISTING BRIDGE PLANS CAN BE VIEWED AT ODOT DISTRICT 4 OFFICE.

<u>ITEM 202, PORTIONS OF STRUCTURE REMOVED. OVER 20 FOOT SPAN.</u> AS PER PLAN:

- A. THIS WORK CONSISTS OF THE REMOVAL OF THE EXISTING SUPERSTRUCTURE (
 CONCRETE DECKS INCLUDING PARAPETS, MEDIANS, RAILINGS, DECK JOINTS,
 BEAMS, GIRDERS, CROSS FRAMES, ETC.) AS WELL AS THE PIERS TO 1 FOOT BELOW
 EXISTING GRADE. THE PROVISIONS OF ITEM 202 APPLY. SUBMIT CONSTRUCTION PLANS ACCORDING TO CMS 501.05.
- B. REMOVALS METHODS: THE CONTRACTOR MAY REMOVE CONCRETE BY CUTTING AND BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNTED CHISEL TYPE TOOLS. FOR REMOVAL OVER STRUCTURAL MEMBERS (STEEL GIRDERS), THE CONTRACTOR MAY USE A HAMMER HEAVIER THAN 35 POUNDS [16] KILOGRAMS] BUT NOT TO EXCEED 90 POUNDS [41 KILOGRAMS] UNLESS APPROVED BY THE ENGINEER.
- C. SUBSTRUCTURE CONCRETE REMOVAL: REMOVAL OF PORTIONS OF ABUTMENTS INCLUDING BACKWALLS AND WINGWALLS, PIER CAPS AND COLUMNS TO I FOOT BELOW EXISTING GRADE. REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL BE PERMITTED.
- D. MEASUREMENT & PAYMENT: THE DEPARTMENT WILL MEASURE THE QUANTITY OF REMOVALS ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES OF REMOVALS AT THE CONTRACT PRICE FOR ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN.

UTILITY LINES:

UTILITY LINES: THE UTILITY(IES) SHALL BORE ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES. THE CONTRACTOR AND UTILITY(IES) ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

ASBESTOS NOTIFICATION:

AN ASBESTOS SURVEY OF TECH BRIDGE STRUCTURES FOR REHABILITATION WAS CONDUCTED BY A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST. THE SURVEY DETERMINED THAT NO ASBESTOS IS PRESENT ON THE BRIDGE STRUCTURE

A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORM WI BE PROVIDED TO THE SUCCESSFUL OF DEMOLITION AND RENOVATION FORM WI BE PROVIDED TO THE SUCCESSFOL BIDDER. THE CONTRACTOR SHALL COMPLETE THE FORM AND SUBMIT IT TO OHIO EPA, DIVISION OF AIR POLLUTION WITH FULL FEE PAYMENT. ONLINE SUBMISSION IS AVAILABLE AND IS ENCOURAGED OR, THE CONTRACTOR SHALL SUBMIT IT TO ONE OF THE ADDRESSES BELOW AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION.

ASBESTOS PROGRAM OHIO EPA, DAPC P.O. BOX 1049 COLUMBUS, OH 43216-1049

OR

ASBESTOS PROGRAM OHIO EPA. DAPC 50 W. TOWN ST., SUITE 700 COLUMBUS, OH 43215

THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED FORM TO THE ENGINEER AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION. THE FORM SHALL INCLUDE:

1) THE CONTRACTORS NAME AND ADDRESS, 2) THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE BRIDGE REMOVAL AND 3) A DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHOD(S) TO BE

COPIES OF THE OEPA FORM AND BRIDGE INSPECTION REPORT ARE AVAILABLE FOR REVIEW AT THE ODOT DISTRICT 12 OFFICE, 5500 TRANSPORTATION BOULEVARD, GARFIELD HEIGHTS. OHIO 44125.

BASIS FOR PAYMENT - THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, AND MATERIAL NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN.

ROADWAY CONSTRUCTION:

FOR ROADWAY PLANS, SEE SHEETS 101204 AND 102204.

MAINTENANCE OF TRAFFIC:

FOR MAINTENANCE OF TRAFFIC PLANS, SEE SHEETS 16 204 THRU 82204.

STANDARD ABBREVIATIONS:

BFARINGS C/C CENTER TO CENTER CONSTRUCTION JOINT C.J. CPP. CORRUGATED PLASTIC PIPE CLEAR

DIA. DIAMETER E.F. EQ. EXIST. EACH FACE EQUAL EXISTING EXPANSION EXP.

FORWARD ABUTMENT F.A. FAR FACE FIELD SPLICE

MIN. MINIMUM N.F. PEJF NFAR FACE

PREFORMED EXPANSION JOINT FILLER R.A. REAR ABUTMENT

SER. SERIES SPACING/SPACES

TYPICAL

				STA-225-00.59C ESTIMATED QUANTITIES			BY: CRG 12/24/18	CHECKED DATE: 0	
TTCU	ITCM CVT	TOTAL	LINITC	DECCRIPTION			5-0059		
ITEM	ITEM EXT.	02/S<2/BR	UNITS	DESCRIPTION	ABUTS.	PIERS	SUPER.	GENERAL	SHT. REI
202	11203	LUMP		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LUMP	2
202	22900	278	SQ YD	APPROACH SLAB REMOVED				278	
202	23500	278	SQ YD	WEARING COURSE REMOVED				278	
SPECIAL	65000	2	EA	SETTLEMENT PLATFORM				2	3



DESTGNED	DRAWN	REVIEWED	DATE
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-62T / 225-%01.38L / 00. No. 102870 TA-7R& ID S7 37 PI 2

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ITEM SPECIAL - SETTLEMENT PLATFORMS:

DESCRIPTION: THIS ITEM CONSISTS OF FURNISHING, CONSTRUCTING, AND MAINTAINING SETTLEMENT PLATFORMS AND OBTAINING SETTLEMENT READINGS AS REQUIRED BY THE PLANS OR AS DIRECTED BY THE ENGINEER. AT THE OPTION AND EXPENSE OF THE CONTRACTOR, ADDITIONAL SETTLEMENT PLATFORMS MAY BE INSTALLED AT LOCATIONS APPROVED BY THE ENGINEER. SETTLEMENT READINGS SHALL BE TAKEN WEEKLY DURING CONSTRUCTION. AFTER CONSTRUCTION, READINGS SHOULD BE TAKEN MONTHLY UNTIL FINAL ASPHALT SURFACE COURSE INSTALLED ON SR 225 BRIDGE LIMITS. THE READINGS SHALL BE PLOTTED ON GRAPH PAPER PRESENTING DEFORMATION (ON THE NEGATIVE Y-AXIS) AND FILL HEIGHT (ON THE POSITIVE Y-AXIS) VERSUS TIME (ON THE X-AXIS). IN ORDER TO CREATE THE GRAPH, USE THE SETTLEMENT PLATFORM SPREADSHEET LOCATED AT HTTP://WWW.DOT.STATE.OH.US/DIVISIONS/ENGINEERING/GEOTECHNICAL/GEOTECHNICAL_DOCUMENTS/BLANKS_SETTLEMENT_READING_PLOTS-ENGLISH.XLS IN THE OGE WEBSITE PUBLICATIONS AND DOCUMENTS SECTION. A COPY OF EACH CUMULATIVE PLOT SHALL BE SENT TO THE OFFICE OF GEOTECHNICAL ENGINEERING, ATTENTION: GEOTECHNICAL DESIGN COORDINATOR, AFTER EACH SETTLEMENT READING IS RECORDED.

MATERIALS: SOUND LUMBER SUCH AS 3/4-INCH (19MM) EXTERIOR GRADE PLYWOOD SHALL BE USED FOR THE BASE.THE PIPE SHALL BE 2-1/2-INCH (64MM) STANDARD BLACK PIPE WITH THREADED FITTINGS AS SHOWN ON THE PLANS. A STEEL PLATE 36" X 36" X 1/8" (915MM X 915MM X 3.2MM) MAY BE SUBSTITUTED FOR THE LUMBER FOR THE PLATFORMS, AT THE CONTRACTOR'S OPTION.

CONSTRUCTION METHODS: THE PLATFORM SHALL CONFORM TO THE DETAILS SHOWN ON THE PLANS. THE PLATFORM SHALL BE SET ON A LEVEL SURFACE. THE PIPE SHALL BE FIRMLY SECURED TO THE PLATFORM AND SHALL BE MAINTAINED IN A PLUMB POSITION DURING THE PLACEMENT OF THE EMBANKMENT. THE PIPE SHALL BE MARKED AT INTERVALS TO FACILITATE MEASUREMENT OF THE DEPTH OF FILL. THE CONTRACTOR SHALL STOP WORK IN ANY LOCATION WHERE THE SETTLEMENT PLATFORM HAS BEEN DISTURBED OR DAMAGED. PLATFORMS OR PIPES DAMAGED OR DISPLACED DURING CONSTRUCTION SHALL BE RESTORED TO THEIR PROPER CONDITION AT THE CONTRACTOR'S EXPENSE. PRIOR TO THE FINAL ASPHALT SURFACE COURSE, THE TOP OF THE SETTLEMENT PLATFORM PIPE SHALL BE CUT OFF ONE FOOT BELOW THE PROPOSED FINISHED GROUND SURFACE.

METHOD OF MEASUREMENT: THE NUMBER OF SETTLEMENT PLATFORMS TO BE PAID FOR SHALL BE THE ACTUAL NUMBER OF SETTLEMENT PLATFORMS COMPLETED, MAINTAINED, AND ACCEPTED BY THE ENGINEER.

BASIS OF PAYMENT: PAYMENT SHALL BE MADE AT THE CONTRACT UNIT PRICE EACH FOR "ITEM SPECIAL SETTLEMENT PLATFORMS" WHICH IS COMPENSATION FOR CONSTRUCTING MAINTAINING, AND MONITORING THE SETTLEMENT PLATFORMS INCLUDING FURNISHING ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK. PAYMENT SHALL NOT BE MADE FOR SETTLEMENT PLATFORMS WHICH BECOME USELESS DUE TO DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS

SETTLEMENT PLATFORM NOTES:

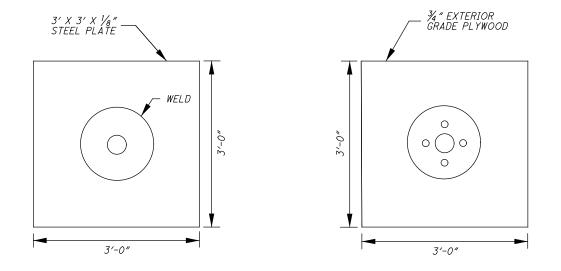
- 1. SETTLEMENT PLATFORMS SHALL BE PLACED AT THE LOCATION INDICATED IN THE PLANS, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- 2. CONTRACTOR HAS OPTION OF USING EITHER STEEL OR PLYWOOD PLATFORM BASE.
- 3. CONTRACTOR SHALL FURNISH MATERIALS AND LABOR TO EXTEND PIPE UP THROUGH ENTIRE FILL.
- 4. SETTLEMENT PLATFORMS SHALL BE ANCHORED BY STAKES DRIVEN AT EACH CORNER TO PREVENT OVERTURNING.

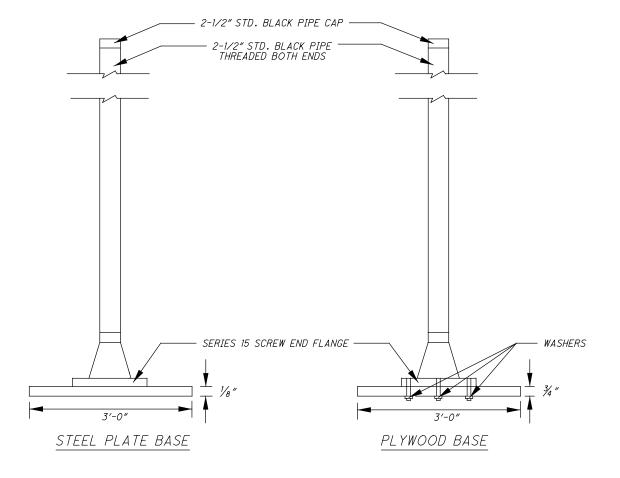
ROADWAY EMBANKMENT CONSTRUCTION SEQUENCE (SR-225):

THE GENERAL SEQUENCE FOR ROADWAY EMBANKMENT PREPARATION, MONITORING AND FINAL CONSTRUCTION IS PROVIDED BELOW. MODIFICATIONS TO THE CONSTRUCTION SEQUENCE MAY BE APPROVED BY THE ENGINEER.

- 1. PERFORM CLEARING AND GRUBBING IN ACCORDANCE WITH CMS 201.
- 2. REMOVE EXISTING PAVEMENT AND STRUCTURES IN ACCORDANCE WITH CMS 202.
- 3. INSTALL SETTLEMENT PLATFORMS AND PLACE FILL EMBANKMENT IN ACCORDANCE WITH ITEM 203 TO THE FINAL GRADES AS SHOWN ON THE PLANS. NO MORE THAN 4 FEET OF FILL MAY BE PLACED DURING A 24 HOUR PERIOD.
- 4. MONITOR INSTRUMENTATION THROUGHOUT THE WAITING PERIOD.
- 5. FOLLOWING APPROVAL FROM THE ENGINEER THAT THE EMBANKMENT HAS REACHED THE REQUIRED 95% CONSOLIDATION, CONSTRUCT THE PAVEMENT (UP TO INTERMEDIATE COURSE), GUARDRAIL AND OTHER APPURTENANCES.
- 6. PLACE A SCRATCH COURSE OF INTERMEDIATE COURSE ASPHALT TO PLAN ELEVATIONS.
- 7. PLACE THE SURFACE COURSE OF ASPHALT AND ANY OTHER APPURTENANCES.

THE DATA FROM THE SETTLEMENT PLATFORMS WILL BE USED BY THE ENGINEER TO EVALUATE IF THE CONSOLIDATION REQUIREMENTS HAVE BEEN ACHIEVED (95% PRIMARY CONSOLIDATION REQUIRED). A WAITING PERIOD OF 7 MONTHS IS ESTIMATED TO ACHIEVE THE REQUIRED CONSOLIDATION.





SETTLEMENT PLATFORM DETAILS

DESIGN AGENCY
ABER

940 WHITE POND DRIVE SUITE E
AKRON, Ohio 44320